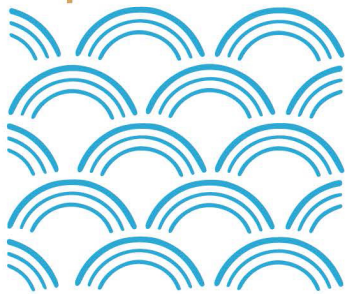
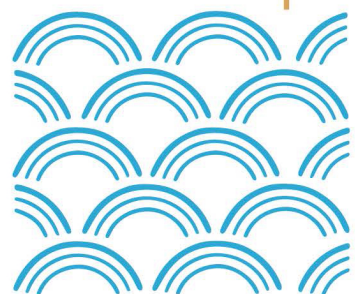


THE FOSSIL WEEK



5TH INTERNATIONAL
PALAEONTOLOGICAL
CONGRESS



From July 9th to 13th, 2018
France



GENERAL PLANNING

Overview of the week

	SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
8:15						
8:30		Registrations Mutualité				
8:45			Sessions		Sessions	Sessions
9:00		Board	S01 - S06 - S12		S03 - S05 - S09	S03 - S09 - S14
9:15		Museum President	S17 - S19 - S23		S10 - S13 - S15	S21 - S25 - S27
9:30		SU President	S24 - S31 - S36		S16 - S21 - S36	S32 - S42 - S43
9:45		CNRS representative	S41		S37 - S39	
10:00						
10:15		Marion Bramford				
10:30			Coffee break		Coffee break	Coffee break
10:45				Workshops		
11:00		Diego Pol	Sessions		Sessions	Sessions
11:15			S01 - S06 - S12		S03 - S05 - S09	S14 - S21 - S27
11:30			S17 - S23 - S24		S10 - S13 - S15	S32 - S33 - S42
11:45		Andrew Knoll	S29 - S31 - S36		S16 - S21 - S36	S43
12:00			S41		S37 - S39	
12:15		Board				
12:30						
12:45						
13:00						
13:15		Lunch break	Lunch break		Lunch break	Lunch break
13:30						
13:45						
14:00						
14:15		Sessions	Sessions		Sessions	Tatsuo Oji
14:30		S01 - S04 - S07	S06 - S12 - S17		S02 - S03 - S05	
14:45		S11 - S12 - S22	S20 - S23 - S28		S09 - S10 - S15	Anjali Goswami
15:00		S26 - S30 - S34	S29 - S31 - S36		S16 - S21 - S37	
15:15		S41 - S43	S40		S39 - S43	Board
15:30						
15:45						
16:00		Coffee break	Coffee break		Coffee break	
16:15						
16:30		Sessions	Sessions		Sessions	
16:45		S01 - S04 - S07	S12 - S18 - S20		S02 - S03 - S05	
17:00		S11 - S12 - S22	S23 - S28 - S29		S09 - S10 - S15	
17:15		S26 - S30 - S34	S31 - S35 - S36		S16 - S21 - S37	
17:30		S41	S40		S42 - S43	
17:45				IPA business meeting		
18:00						
18:15		Pause	Pause		Pause	
18:30						
18:45			Group photo			
19:00						
19:15		Music event				
19:30						
19:45						
20:00			Cocktail GGE			
20:15						
20:30			Trix		Gala dinner	
20:45						
21:00						
21:15						
21:30						
22:00						
22:30						

Oral sessions

Monday July 9th, p.m.

Sessions: S01, S04, S07, S11, S12, S22, S26, S30, S34, S41, S43

Session S01: Ancient ecosystems trapped in amber - B. Wang, V. Perrichot, E. Jarzembowski

Amphitheatre 45A

Chair: Bo Wang

14:00 - 14:15

Welcoming and introduction

14:15 - 14:45

Leyla J. Seyfullah: *Keynote: Ambers and resins, past and future*

14:45 - 15:00

Suryendu Dutta: *Molecular composition of fossil and extant dammar resins: Insights into molecular taphonomy of plant terpenoids*

15:00 - 15:15

Romain Garrouste, Benjamin Carbuccia & André Nel: *The Lowermost Eocene Oise amber: new data, new methods*

15:15 - 15:30

Vincent Perrichot, Brendon E. Boudinot, Cédric Chény, Jim Cole, Laurent Jeanneau, Alexander R. Schmidt, Jacek Szewdo & Bo Wang: *The age and paleobiota of Ethiopian amber revisited*

15:30 - 15:45

Mario Schädel, Vincent Perrichot & Joachim Haug: *Marine life captured in amber – Exceptional preservation of small aquatic isopod larvae in Cretaceous amber from France*

15:45 - 16:15

Coffee break

Chair: Vincent Perrichot

16:15 - 16:30

Renate Matzke-Karasz, Maria L. Serrano-Sánchez, Liseth Pérez, Dietmar Keyser, Radovan Pipík, Jessica Fischer, Peter Cloetens, Paul Tafforeau & Francisco Vega: *Ostracoda in Miocene amber from Chiapas, Mexico*

16:30 - 16:45

Agnieszka Soszynska-Maj, Wiesław Krzeminski & Katarzyna Kopec: *Diversity of scorpionflies (Mecoptera) in fossil resins and its implication for evolutionary research*

16:45 - 17:00

Edmund Jarzembowski & Daran Zheng: *Cretaceous dragonflies (Insecta: Odonata) preserved in amber*

17:00 - 17:15

Jiajia Wang, Weiting Zhang & Dong Ren: *The amphiesmenopteran fossils from Asia offering important information for the early evolution of this group*

17:15 - 17:30

Cédric Chény, Vincent Perrichot & Bo Wang: *Myrmicine ant (Hymenoptera: Formicidae) diversity in Miocene amber of Zhangpu, China*

Session S04: Big Data in Palaeontology: sharing knowledge for leveraging research options - W. Kiessling, L. Villier, J. Bardin

Amphitheatre 44

Chair: Wolfgang Kiessling

14:00 - 14:30

Lisa Park Boush & John Williams: *Keynote: The Status and Future of Big Data in Paleontology and a Roadmap for Building a Data Synthesis Center for the Paleogeosciences*

14:30 - 14:45

Michael Stephenson, Junxuan Fan, Daniel Condon & Michael Howe: *Setting biostratigraphical data free: a collaboration between the British Geological Survey and the Nanjing Institute of Geology and Palaeontology*

14:45 - 15:00

Allison Hsiang, Anieke Brombacher, Marina Rillo, Maryline Mleneck-Vautravers, Stephen Conn, Catherine Davis, Sian Lordsmith, Lyndsey Fox, Jeroen Groeneveld, Anna Jentzen, Julie Meilland, Kirsty Edgar, Aurore Movellan, Isabel Fenton, Bridget Wade, Michael Henehan, Harry Dowsett, Erin Saupe & Pincelli Hull: *Capturing intraspecific variability in the global ocean: Building the largest public database of planktonic foraminifera images and IDs for automated species recognition using machine learning*

15:00 - 15:15

Jérémié Bardin: *MethoDB: a database of methods*

15:15 - 15:30

Melanie Hopkins & Katherine St. John: *The influence of inapplicable/secondary characters on disparity studies*

15:30 - 15:45

David Marjanović & Michel Laurin: *Reproducibility in phylogenetics: the importance of accuracy in data matrices for phylogenetic analysis*

15:45 - 16:15

Coffee break

Chair: Loïc Villier

16:15 - 16:45

Bruce Lieberman & Julien Kimmig: *Keynote: Digitizing fossils to advance macroevolutionary research*

16:45 - 17:00

Adam T. Kocsis & Wolfgang Kiessling: *The R package 'divDyn': diversity dynamics from fossil occurrence data*

17:00 - 17:15

Roger Close, Roger Benson & Richard Butler: *Cenozoic marine diversity is not exceptional for the Phanerozoic*

17:15 - 17:30

Wolfgang Kiessling & Kenneth De Baets: *Ecological and evolutionary drivers of temporal variations in body size*

17:30 - 17:45

Adam T. Kocsis, Carl Reddin & Wolfgang Kiessling: *The stability of coastal marine biogeography over the last 10 million years*

Session S07: Bird in the past environments - D. Angst, A. Chinsamy-Turan

Room 109 – 1st floor – Towers 44-45

Chair: Delphine Angst

14:00 - 14:15

Rui Qiu, Xiaolin Wang, Qiang Wang, Ning Li, Jialiang Zhang & Yiyun Ma: *A new caudipterid dinosaur from the Lower Cretaceous Jehol Group of China*

14:15 - 14:30

Anusuya Chinsamy-Turan, Luis Chiappe & Jesús Marugan-Lobón: *Life history of the basal pygostylian, Confuciusornis sanctus*

14:30 - 14:45

Michael Pittman, Thomas G Kaye, Xiaoli Wang, Xiaoting Zheng, Scott A Hartman, Guillermo Navalón & Xing Xu: *Laser-stimulated fluorescence reveals preserved soft tissues which unravel the complexity of avian flight evolution*

14:45 - 15:00

Francisco Serrano & Luis Chiappe: *Soaring like a vulture in the Cretaceous: Sapeornis and the evolution of energy-saving aerial strategies in early birds*

15:00 - 15:15

Min Wang, Zhiheng Li & Zhonghe Zhou: *Bone fusions in manus and pelvis in the early evolution of birds in light of new discovery*

15:15 - 15:30

Jingmai O'Connor & Zhonghe Zhou: *Pygostyle formation in early birds*

15:30 - 15:45

Luis Chiappe, William Nava, Agustin Martinelli, Ryan Tucker & Herculano Alvarenga: *An exceptional bone bed of Enantiornithine birds in the late Cretaceous of Brazil*

15:45 - 16:15

Coffee break

Chair: Anusuya Chinsamy-Turan

16:15 - 16:30

Michael Pittman, Rui Pei, Pablo A Goloboff, T Alexander Dececchi, Michael B Habib, Thomas G Kaye, Hans C E Larsson, Mark A Norell, Stephen L Brusatte & Xing Xu: *Multiple origins of powered flight among paravian theropod dinosaurs: constraints from new phylogenetic, aerodynamic and anatomical data*

16:30 - 16:45

Delphine Angst & Eric Buffetaut: *Ontogenetic change in the giant bird Gastornis*

16:45 - 17:00

Katie Matts & R. Ewan Fordyce: *New Zealand's Platydypetes old penguins with a new view: significance of the genus*

17:00 - 17:15

Eric Buffetaut & Delphine Angst: *How large was the Pleistocene 'giant ostrich' of China? Mass estimates for *Struthio anderssoni* and their implications.*

17:15 - 17:30

Sharad Master: *Taphonomic implications of a thanatocoenosis dominated by avifauna exhibiting opisthotonic postures, around lethal CO₂-emanating thermal springs in the Danakil Depression, Afar, Ethiopia*

17:30 - 17:45

Daniel Field, Antoine Bercovici, Jacob Berv, Regan Dunn, Tyler Lyson, David Fastovsky, Vivi Vajda & Jacques Gauthier: *Selection on avian ecology structured the dawn of the crown bird radiation*

17:45 – 18:00

Christine Böhmer, Olivia Plateau, Raphaël Cornette & Anick Abourachid: *What is a long neck? The effects of scaling relationships between skeletal dimensions and body size in living and fossils birds*

Session S11: Data, dispersals and interchanges through time: a land mammal perspective - P.O. Antoine, V. Zeitoun, L.J. Flynn

Amphitheatre 55B

Chair: Lawrence J. Flynn

14:00 - 14:30

Pascal Tassy: *Keynote: Horses and elephants through time and the dispersal paradox*

14:30 - 14:45

Ebru Albayrak: *Anatolia: a crossroads between Africa and Eurasia for elephants and mammoths?*

14:45 - 15:00

Hao-wen Tong: *Early Pleistocene forerunners of the Mammuthus-Coelodonta faunal complex in Nihewan Basin, northern China*

15:00 - 15:15

Marian Reyes, **Pierre-Olivier Antoine**, Angel Bautista & Thomas Ingicco: *A subcomplete skeleton of Rhinoceros philippinensis from the early Middle Pleistocene of Luzon sheds light on mainland mammal dispersals to the Philippines*

15:15 - 15:30

Constance Bronnert & Grégoire Métais: *The phylogeny of early Eocene perissodactyls and insights into their early dispersals*

15:30 - 15:45

Bastien Mennecart, Gudrun Daxner-Höck & Ursula Göhlich: *New data on the ruminant biostratigraphy from Mongolia and the Asia-Europe connection during the Oligocene*

15:45 - 16:15

Coffee break

Chair: Pierre-Olivier Antoine

16:15 - 16:30

Kévin Le Verger, Floréal Solé, Sandrine Ladevèze, Valentin Fischer & Stéphane Peigné: *Is the enigma of the origin of the bear dogs (Mammalia, Carnivora, Amphicyonidae) resolved? New evolutionary and paleobiogeographic scenarios*

16:30 - 16:45

Chiara Angelone & Zhao Qun Zhang: *New Eocene-Oligocene Asian fossils cast light on the early evolution of lagomorphs*

16:45 - 17:00

Myriam Boivin: *New insights into the early historical biogeography of New World hystricognaths (Caviomorpha, Rodentia) from the Paleogene of Peruvian Amazonia*

17:00 - 17:15

Ozan Erdal, M. Korhan Erturaç, H. Nüzhet Dalfes & Sevet Sen: *Micromammals from the Pliocene and Quaternary deposits of North Anatolian Fault Zone: implications on the age, paleoenvironment and dispersals among Eurasia–Anatolia*

17:15 - 17:30

Michèle Morgan, David Pilbeam, Lawrence Flynn, John Barry, A. Kay Behrensmeyer & Catherine Badgley: *A near total replacement of ungulate fauna in the early Late Miocene of northern Pakistan*

17:30 - 17:45

Lawrence J. Flynn & Wenyu Wu: *Yushe Basin, China: Late Neogene biogeographic affinity at temperate latitude*

17:45 – 18:00

Juan Carrillo, Daniele Silvestro, Alexander Zizka, Carlos Jaramillo, Christine Bacon, Søren Faurby, Marcelo Sanchez-Villagra & Alexandre Antonelli: *Examination of migration patterns during the Great American Biotic Interchange*

Session S12: Early animal life - J. Vannier, J.B. Caron

Great Amphitheatre of Muséum (GAM) in Jardin des Plantes

Chair: Lidya Tarhan

14:00 - 14:15

Alex Liu, Frances Dunn, Charlotte Kenchington & Philip Wilby: *Colonies, clones and modularity: a new view of Ediacaran fronds*

14:15 - 14:30

Andrey Ivantsov, **Maria Zakrevskaya** & Aleksey Nagovitsin: *The first evidence of disability in the "Garden of Ediacara"*

14:30 - 14:45

Ilya Bobrovskiy, Janet Hope, Andrey Ivantsov, Benjamin Nettersheim, Christian Hallman & Jochen Brocks: *Determining phylogenetic position of Ediacaran macrofossils Dickinsonia and Dickinsonia using biomarkers*

14:45 - 15:00

Shuhai Xiao & Qing Tang: *Did the earliest sponges have biomineralized spicules?*

15:00 - 15:15

Frances Dunn, Charlotte Kenchington & Philip Wilby: *A new skeletonising cnidarian from Charnwood Forest, UK (Late Ediacaran, ca 561-556 Ma)*

15:15 - 15:30

Emily G. Mitchell, Simon J. Harris, Philip Wilby & Nicholas Butterfield: *The importance of body-size for Ediacaran communities of Avalonia*

15:30 - 15:45

Maria Zakrevskaya: *Palaeoecological analysis of Late Vendian benthic communities of the southeastern White Sea region*

15:45 - 16:15

Coffee break

Chair: Shuhai Xiao

16:15 - 16:30

Lidya Tarhan, Mary Droser & James Gehling: *The importance of substrate for Ediacara palaeoecology, palaeoenvironment and taphonomy*

16:30 - 16:45

Anette Högström, Sören Jensen, Magne Hoyberget, Guido Meinhold, Duncan McIlroy, Jan Ove Ebbestad, Wendy Taylor, Heda Agic & Teodoro Palacios: *Palaeopascichnus from the Ediacaran of the Digermulen Peninsula, Arctic Norway and the age of the Varanger Ice Age*

16:45 - 17:00

Cleber Diniz, Juliana Leme & Paulo Boggiani: *Dichotomous branched seaweed Eoholyneacea in the Tamengo Formation, Ediacaran, Brazil*

17:00 - 17:15

Chengguo Guan, Chuanming Zhou, Wei Wang & Bin Wan: *Fluctuation of shelf basin redox conditions in the early Ediacaran: evidence from framboidal pyrite analyses of Lantian Formation black shales and fossils in South China*

17:15 - 17:30

Brittany Laing, Luis Buatois, Gabriela Mangano & Guy Narbonne: *Redefining the Treptichnus pedum zone at the Global Boundary Stratotype Section and Point (GSSP): a critical reassessment of the Ediacaran-Cambrian boundary*

17:30 - 17:45

Bing Pan, Christian B. Skovsted, Luoyang Li, Hao Yun & Guoxiang Li: *Small shelly fossils from the Cambrian Series 2 Xinji and Houjiashan formations along the south and south-west margin of North China Platform*

17:45 – 18:00

Léa Devaere, Dieter Korn, Abbas Ghaderi & Alireza Bavandpur: *The Cambrian Explosion in Iran: new insights from small shelly fossils of the Ediacaran-Cambrian transition in the Soltanieh and Alborz Mountains*

Session S22: Life in Palaeozoic seas and oceans - E. Nardin, V. Perrier, T. Vandenbroucke

Amphitheatre 34A

Chair: Thijs Vandenbroucke & Elise Nardin

14:00 - 14:15

Lukáš Laibl: *Evolutionary modifications of early developmental stages in Cambrian trilobites*

14:15 - 14:30

Alice Clément, B. King, J. Lu, H. Dutel, K. Trinajstić, R. Cloutier & J. Long: *Rates of evolution in actinistians (Osteichthyes: Sarcopterygii) and an exceptional new 3D coelacanth the Devonian of Australia*

14:30 - 14:45

Jean-Paul Kundura, M.-H. Kundura: *Trilobite assemblages in Floian of Montagne Noire, France: focus on the upper part of the "Formation de Saint-Chinian"*

14:45 - 15:00

Tim De Backer, P. McLaughlin, J. De Weirtdt, C. De Boodt, P. Emsbo, A. Bancroft & T. Vandenbroucke: *Initial steps in ordering events of the Late Ordovician mass extinction: Chitinozoan contributions to Maquoketa Group holostratigraphy (upper Katian, Wisconsin, USA)*

15:00 - 15:15

Vincent Perrier, D. Siveter & M. Williams: *Global biogeography and biostratigraphy of Silurian myodocope ostracods*

15:15 - 15:30

Qingyi Sheng & X. Wang: *Mississippian foraminifers from South China: their chronostratigraphic significance and implications for glacioeustasy*

15:30 - 15:45

Dorit Korngreen & Olga Orlov-Labkovsky: *Combining foraminifera identification, their extirpation and occurrence, $\delta^{18}\text{O}$, $\delta^{13}\text{C}$ and % carbonate curves define global events in eutrophic environments and promote world-wide insights*

15:45 - 16:15

Coffee break

Chair: Vincent Perrier & Elise Nardin

16:15 - 16:30

Nikole Bingham-Koslowski: *Paleoenvironmental investigations of Early Paleozoic seas from the northern Canadian Atlantic Margin: results from core analyses of the southeastern Baffin Island Shelf and Hopedale Basin*

16:30 - 16:45

Oldřich Fatka, P. Budil & L. Laibl: *Possible shell disease syndrome in late holaspid Ordovician trilobites*

16:45 - 17:00

Chad Morgan, C. Henderson & B. Pratt: *Phosphatisation and bacterial – hyolithid association in the Middle Cambrian of Western Canada*

17:00 - 17:15

Carrie Tyler, H. L. Kempf, I. Castro, A. Dineen & P. Roopnarine: *Ecosystem dynamics and the consequences of invasive species*

17:15 - 17:30

Zivile Zigaite-Moro, V. Karatajute-Talimaa, M. M. Joachimski & T. Jeffries: *Silurian vertebrates from northern Mongolia: diversity, ecology and environment*

17:30 - 17:45

Julien Denayer: *Eifelien corals and reefs of S Belgium, new insights on a cold case*

17:45 – 18:00

Christian Klug, E. Samankassou, A. Pohle, M. Zapalski & D. Korn: *Couscous ai frutti di mare – Early Devonian palaeoecology of the Moroccan mudmound locality Hamar Laghdad*

Session S26 Microorganism evolution and interaction with biogeochemical cycles and climate - A. Bartolini, S. Gardin, L. O'Dogherty

Amphitheatre 55A

Chair: Luis O'Dogherty & Silvia Gardin

14:00 - 14:30

Martin Ronald & Thomas Servais: *Keynote: Phytoplankton evolution and diversification of the marine biosphere*

14:30 - 14:45

Alessandro Menini, Guillaume Suan, Frédéric Quillevere, Jeremy Martin, Auguste Hassler, Vincent Balter, Maria Rose Petrizzo & Emanuela Mattioli: *Calcareous nannofossil fluxes and calcium isotopes across the Paleocene-Eocene Thermal Maximum*

14:45 - 15:15

Peter O. Baumgartner, Maximilien Bôle, Masayuki Ikeda & Rie Hori: *Keynote: Evolution of siliceous plankton and radiolarite - its relation with the carbon and silicon cycles and global climate*

15:15 - 15:30

Tsuyoshi Ito: *Upper Paleozoic radiolarian cherts within accretionary complexes in Southwest Japan: Increase of chert accumulation in the middle Cisuralian, Permian*

15:30 - 15:45

Rie Hori, Minoru Ikehara, Junichiro Kuroda & Kunio Kaiho: *Triassic – Jurassic boundary event recorded in Pacific pelagic sites*

15:45 - 16:15

Coffee break

Chair: Silvia Gardin & Annachiara Bartolini

16:15 - 16:45

Mario Giordano & Andrew H. Knoll: *Keynote: Long term changes in ocean chemistry (especially in S concentration) may have contributed to phytoplankton radiation*

16:45 - 17:00

Bérengère Broche, Diana Ruiz-Pino, Ian Probert, François Prévot, Laurence Lemelle, Alexandre Simionovici, Guillaume Paris, Annachiara Bartolini & Silvia Gardin: *The impact of sulfur on the biocalcifier *Emiliana huxleyi* (Prymnesiophyceae). Implications for biocalcification crises in the ocean*

17:00 - 17:15

Caroline Thaler, Marc Dellinger, Guillaume Paris, Sophie Berland, Arul Marie, Delphine Dissard & Annachiara Bartolini: *Sulfate incorporation in foraminifera cell and test: mechanisms and validation of a proxy for past seawater composition*

17:15 - 17:30

Bernhard Schink: *Pyrite formation from FeS and H₂S – a novel type of energy metabolism*

17:30 - 17:45

Ke Pang, Qing Tang, Bin Wan, Xunlai Yuan & Shuhai Xiaoz: *Heterocystous nitrogen-fixing cyanobacteria from the Tonian Period and their implication for geobiological feedbacks*

17:45 – 18:00

Roni Tadir, Sarit Ashkenazi-Polivoda & Sigal Abramovich: *Testing morphological trends of long range planktonic foraminifera species, example from the Late Cretaceous Pseudotextularia nuttalli lineage*

Session S30: Palaeontology and geological heritage - G. Egoroff, S. Charbonnier, A. Lefort

Amphitheatre 45B

Chair: Sylvain Charbonnier

14:00 - 14:15

Herb Meyer: *Managing geoheritage for research, conservation and education at Florissant Fossil Beds, Colorado, USA: A textbook example for North America*

14:15 - 14:30

Alexis Rojas, Yerly Barrera Huertas, Andrés Moreno Ayala & Martha García: *Saving a piece of the Colombian's geoheritage: Organizing and characterizing the macrofossil collection of the Floresta Formation (Devonian, South America) at the National Pedagogic University*

14:30 - 14:45

Thierry Tortosa & Yves Dutour: *New discoveries of Rhabdodon from the Campanian of the National Natural Reserve of Sainte-Victoire (Southeastern France)*

14:45 - 15:00

Xiaosong Zhang: *Promote the development of cultural tourism economy by using the research results of Paleontology*

15:00 - 15:15

John Marshall, Steve Etches, David Martill, Andy Racey & Simon Conway-Morris: *The Etches Collection- a new museum of Jurassic marine life in Kimmeridge, Dorset, UK*

15:15 - 15:30

Brian Kuhn & Patrick Randolph-Quinney: *The southern boundary of Australopithecus africanus: are the Buxton-Norlim Limeworks a false boundary for early hominins?*

15:30 - 15:45

Thierry Tortosa, Didier Bert, Myette Guiomar, Christine Balme & Stéphanie Larbouret: *Natural reserves for the study and protection of paleobiodiversity in the Provence-Alpes-Côte d'Azur Region (PACA, SE France)*

15:45 - 16:15

Coffee break

Chair: Patrick De Wever

16:15 - 16:30

Hugo Corbi, Francisco Asensio-Montesinos, Antonio Abellán & Javier Martínez-Martínez: *Paleontology and geological heritage through 3D facies distribution models artistically recreated*

16:30 - 16:45

James Gehling & Mary Droser: *Nilpena: An Ediacaran field laboratory in South Australia*

16:45 - 17:00

Myette Guiomar & Didier Bert: *Scientific research and Nature Reserves: a win-win partnership, the example of the National Natural Geological Reserve of Haute-Provence, France*

17:00 - 17:15

Yuliya Glazyrina & Sergey Buzmakov: *Permian period geological heritage interpretation at the place of its discovery: Perm Regional Museum and Perm University framework*

17:15 - 17:30

Melissa Grey: *Conservation monitoring at the Joggins Fossil Cliffs UNESCO World Heritage Site - ten years later*

17:30 - 17:45

Questions and final discussion

17:45 – 18:00

Posters session

Session S34: Testing and developing phylogenetic methods in palaeontology - J. O'Reilly, M. Puttick, D. Pisani, P. Donoghue

Amphitheatre 34B

Chair: Joe O'Reilly & Mark Puttick

14:45 - 15:00

Robert Sansom, Peter Choate, Joseph Keating & Emma Randle: *Parsimony, not Bayesian analysis, recovers more stratigraphically congruent phylogenetic trees*

15:00 - 15:15

Martin Smith: *Bartering accuracy and precision in phylogenetic reconstruction*

15:15 - 15:30

Valentin Rineau, René Zaragüeta i Bagils & **Michel Laurin:** *Impact of errors on cladistic inference: simulation-based comparison between ordered parsimony, unordered parsimony, and three-taxon analysis*

15:30 - 15:45

Chi Zhang & Tanja Stadler: *Inferring net diversification and fossil discovery rates change over time integrating morphological and sequence data*

15:45 - 16:15

Coffee break

Chair: Joe O'Reilly & Mark Puttick

16:15 - 16:30

Mélina Celik, Kaylene Butler, Carmelo Fruciano & Matthew Phillips: *Defining discrete characters using geometric morphometrics: an empirical investigation using macropods.*

16:30 - 16:45

Julie Marin, Guillaume Achaz, Anton Crompton & Amaury Lambert: *The genomic view of diversification*

16:45 - 17:00

Joseph Keating, Russell Garwood, Mark Sutton & Robert Sansom: *Is parsimony dead? Bayesian and parsimony phylogenies tested using both empirical and simulated morphological data*

17:00 - 17:15

Omar Rafael Regalado Fernandez, Paul Upchurch, Paul Barrett, Phil Mannion & Susannah Maidment: *Comparative cladistics of basal Sauropodomorph interrelationships.*

17:15 - 17:30

Joe O'Reilly, Mario dos Reis, Phil Donoghue & Ziheng Yang: *The effect of discrete morphological character covariation on the accuracy of divergence time estimates in a Bayesian framework*

Session S 41: XXIst Century palaeohistology of mineralized tissue M. Rücklin, G. Cuny, D. Germain, S. Sanchez

Room 107 – 1st floor – Towers 44-45

Chair: Martin Rücklin

14:00 - 14:30

Alida Bailleul, Mary Schweitzer, Wenxia Zheng, Jingmai O'Connor & Zhonghe Zhou: *Keynote: Histochemical staining of biomineralized and soft-tissues in fossil dinosaurs and birds: new avenues for XXIst century palaeohistology*

14:30 - 14:45

Gilles Cuny, Gilles Montagnac, Georges Kachacha, Guillaume Guinot & Sébastien Enault: *Dental hypermineralized tissue in actinopterygians (bony fish) and neoselachians (cartilaginous fish): homology or convergence?*

14:45 - 15:00

Donglei Chen, Henning Blom, Tiiu Märss, Sophie Sanchez, Paul Tafforeau & Per Ahlberg: *The first hard evidence for a developmental link between teeth and dermal odontodes: 3D synchrotron dental histology of the Silurian stem osteichthyan Lophosteus*

15:00 - 15:15

Moya M. Smith & Charles Underwood: *Renewal and growth of the dental plates of the holocephalan Harriotta and microstructure of tissues forming special hypermineralised dentine*

15:15 - 15:30

Andrew Lee, Xiaoxuan Dai & Kelly Ezell: *Cranial medullary bone in the turkey informs identification in fossils*

15:30 - 15:45

Aurore Canoville, Lindsay Zanno, Wenxia Zheng & Mary Schweitzer: *New data on the skeletal distribution, microstructure, and chemistry of medullary bone in Neornithes – paleobiological implications*

15:45 - 16:15

Coffee break

Chair: Gilles Cuny

16:15 - 16:30

Armin D. Schmitt, Donald Davesne, Roger B. J. Benson & Sophie Sanchez: *Spatial variability and scaling of osteocyte lacunae: a new protocol based on 3D microtomography in teleost fishes*

16:30 - 16:45

Donald Davesne, Armin D. Schmitt, Matt Friedman, Per E. Ahlberg, Sophie Sanchez & Roger B. J. Benson: *Osteocyte lacunae and genome size in teleosts: towards a tool to detect genomic events in the fossil record?*

16:45 - 17:00

Martial Plassé, Quentin Grimal & Damien Germain: *Explore the trabecular architecture: new data from reptiles*

17:00 - 17:15

Edina Prondvai, Anick Abourachid, Ali Khabazi & Dominique Adriaens: *Exercise, growth and histology in the developing hind limb bones of ducks – a case study*

17:15 - 17:30

Eli Amson & John Nyakatura: *Trabecular 3D architecture and diaphyseal structure - the forelimb of extant and extinct xenarthrans (Mammalia)*

17:30 - 17:45

Jordi Estefa, Jasper Ponstein, Sifra Bijl, Vincent Fernandez, Anusuya Chinsamy, Paul Tafforeau, Jozef Klembara & Sophie Sanchez: *Evolution of the epiphyseal development of the mammalian humerus.*

17:45 – 18:00

Sophie Sanchez, Dennis Voeten, Jorge Cubo, Emmanuel de Margerie, Martin Röper, Vincent Beyrand, Stanislav Bureš & Paul Tafforeau: *Could Archaeopteryx fly actively? New insights based on long-bone cross-section geometry*

Session S43: Open session:

Room 105 – 1st floor – Towers 44-45

Chair: Marie-Béatrice Forel

14:00 - 14:15

Joachim Haug: *Thinking outside the boxes, or why fossils are so important for improving our ways of biological categorisation*

14:15 - 14:30

Jérémy Anquetin & Guillaume Billet: *Peer Community in Paleontology (PCI Paleo): a community-driven, transparent, free and open platform for peer-review in paleontology*

14:30 - 14:45

Kazuyoshi Moriya, Kotaro Shirai, Naoko Sugihara & Kazushige Tanabe: *Estimating a growth rate and habitat of the Late Cretaceous Eutrephoceras (Nautilidae, Cephalopoda) with stable isotope records*

14:45 - 15:00

Bert Van Bocxlaer: *Towards a reconciliation of the commonality of long-term stasis in the fossil record and rare stabilizing selection in extant biota*

15:00 - 15:15

Steffen Kiel & Jörn Peckmann: *The ecology of brachiopods in ancient methane-seep environments*

15:15 - 15:30

Maria McNamara, Nidia Alvarez Armada, Sam Webb, Fiona Gill: *X-ray fluorescence as a tool for interpreting pigmentary colours in fossil insects*

15:30 - 15:45

Paul Taylor, Loïc Villier, Macy Conrad & Mark Wilson: *Bryozoan diversity and palaeoecology in the historical type Campanian (Upper Cretaceous) of Charente, SW France*

15:45 - 16:15
Coffee break

Tuesday July 10th a.m.

Sessions: S01, S06, S12, S17, S19, S23, S24, S31, S36? S41

Session S01: Ancient ecosystems trapped in amber B. Wang, V. Perrichot, E. Jarzembowski (continuing)

Amphitheatre 45A

Chair: Edmund Jarzembowski

08:45 - 09:15

Bo Wang: *Keynote: Cretaceous Burmese amber biota*

09:15 - 09:30

Qingqing Zhang & Bo Wang: *Brachyceran flies in mid-Cretaceous Burmese amber: diversity and ecological significance*

09:30 - 09:45

Qi Zhang, Alexandr Rasnitsyn, Haichun Zhang & Bo Wang: *Hymenoptera in Burmese amber: new families and a review of the fauna*

09:45 - 10:00

Weiting Zhang, Hu Li, Chungkun Shih, Aibing Zhang & Dong Ren: *Bristletails from Myanmar amber provide phylogenetic insight into the evolution of Archaeognatha (Insecta)*

10:00 - 10:15

Tong Bao, Katarzyna Walczynska, Jes Rust & Bo Wang: *New mordellid-like beetles from Upper Cretaceous Burmese amber and their ecological implications*

10:15 - 10:45

Coffee break

Chair: Vincent Perrichot

10:45 - 11:00

Chunxiang Li, Robbin C. Moran, Junye Ma, Bo Wang, Jiasheng Hao & Qun Yang: *A mid-Cretaceous tree fern of Thyrsopteridaceae (Cyatheales) in Myanmar amber*

11:00 - 11:15

Wieslaw Krzeminski, Kornelia Skibinska, Katarzyna Kopec & Agnieszka Soszynska-Maj: *Where were the mosquitoes? Differences and similarities between the Eocene Baltic amber and Recent fauna of Diptera Nematocera*

11:15 - 11:30

Tian Jiang, Bo Wang & Jacek Szewdo: *Hidden secrets of Mimarachnidae planthoppers (Hemiptera: Fulgoromorpha)*

11:30 - 11:45

Marta Konikiewicz & Joanna Makol: *Ectoparasites of arthropods in amber forest – the case of terrestrial Parasitengona mites*

11:45 - 12:00

Ricardo Pérez-de la Fuente, Enrique Peñalver, Dany Azar & Michael S. Engel: *Trash-carrying green lacewing larvae from Early Cretaceous Lebanese amber*

Session S06: Biominerals through time: evolution, taphonomy and traces in the geological record - A.H. Knoll, K. Benzerara, S. Bernard

Room 105 – 1st floor – Towers 44-45

Chair: Karim Benzerara

08:30 - 09:15

Frédéric Marin, Irina Bundeleva, Aurélien Chmiel, Morgane Oudot, Takeshi Takeuchi, Davorin Medakovic & Pascal Neige: *Keynote: Skeletal calcifying matrices in metazoans: evolution and diagenesis*

09:15 - 09:30

Duncan Murdock: *Assessing the fossil evidence for the 'biomineralization toolkit'*

09:30 - 10:00

Corinne E. Myers, Kristin B. Bergmann, Chang-Yu Sun, Nicholas Boekelheide, Andrew H. Knoll & P.U.P.A. Gilbert: *Long Talk: Exceptional preservation of organic matrix and shell microstructure in a Cretaceous Pinna fossil*

10:00 - 10:15

Jasmina Wiemann: *Protein fossilization in vertebrate hard tissues*

10:15 - 10:45

Coffee break

Chair: Andrew K. Knoll

10:45 - 11:00

Julie Aumont, Christel Gervais, Loïc Ségalen, Nathalie Labourdette, Christina Coelho Diogo, Benoit Baptiste, Olivier Beyssac, Romain Amiot, Christophe Lecuyer & Etienne Balan: *Long Talk: Atomic scale transformation of bone in controlled diagenesis experiments*

11:00 - 11:15

Daniele Gaspard: *Alteration in the hierarchical architecture of the calcite layers of fossil rhynchonelliform brachiopods - example of the Cenomanian Sellithyris cenomanensis*

11:15 - 11:30

Sylvain Bernard, Damien Daval, Philippe Ackerer, Sylvain Pont & Anders Meibom: *Burial-induced biases in paleotemperature reconstructions from fossil biocarbonates*

11:30 - 11:45

Bruce Runnegar: *Hypercalcification in Permian circumpolar seas: not what you expect*

11:45 - 12:00

Kenneth De Baets & Axel Munnecke: *Preferential origin of calcitic cephalopod structures during calcite seas*

12:00 - 12:15

Facheng Ye, Lucia Angiolini, Gaia Crippa, Daniela Henkel, Hana Jurikova & Uwe Brand: *The effect of ocean acidification on the shell microstructure in the recent brachiopod *Magellania venosa* (Dixon, 1789): lessons for the past and future*

Session S12: Early animal life J. Vannier, J.B. Caron (continuing)

Great Amphitheatre of Muséum (GAM) in Jardin des Plantes

Chair: Christian Skovsted

08:45 - 09:00

Cui Luo & Joachim Reitner: *Lower Cambrian phosphorite as a new taphonomic window to sponge early evolution: an example from the basal Niutitang Formation, Hunan, China*

09:00 - 09:15

Xing Wang, Jean Vannier, Xiaoguang Yang, Shin Kubota, Qiang Ou, Xiaoyong Yao, Kentaro Uesugi, Osamu Sasaki, Tsuyoshi Komiya & Jian Han: *Coronate-like medusae from the Early Cambrian Kuanchuanpu Formation (ca 535 Ma, China) and the early diversification of cnidarians*

09:15 - 09:30

Roger Thomas: *Remarkably preserved chaetae of *Pelagiella* document the occurrence of torsion in development of an Early Cambrian stem gastropod and support the lophotrochozoan affiliation of the *Mollusca**

09:30 - 09:45

Luke Parry & Jean-Bernard Caron : *The diet of Cambrian worms: inferring feeding in *Burgessochaeta setigera*, a stem group annelid from the Burgess Shale*

09:45 - 10:00

Lars Holmer, Leonid Popov, Mansoureh Ghobadi Pour, Zhiliang Zhang, Zhifei Zhang, Glenn Brock & Tom Clayborn: *Evolutionary significance of a middle Cambrian (Series 3) in situ occurrence of the pedunculate rhynchonelliform brachiopod *Nisusia sulcata**

10:00 - 10:15

Xianfeng Yang & Elena N. Temereva: *The first complete *Eophoronis* fossil from the Cambrian Chengjiang biota, South China, and its significance*

10:15 - 10:45

Coffee break

Chair: Martin Smith

10:45 - 11:00

Christian Skovsted, Bing Pan, Luoyang Li, Fan. Liu, Zhiliang Zhang, Guoxiang Li & Zhifei Zhang: *On the origin of hyolith helens*

11:00 - 11:15

Martin Smith, Haijing Sun, Han Zeng, Fangchen Zhao & Maoyan Zhu: *Hyoliths with pedicles: the origin of the brachiopod bodyplan*

11:15 - 11:30

Glenn A. Brock, John R. Paterson, Christian B. Skovsted, Marissa J. Betts, Russell Bicknell, Timothy P. Topper & Diego C. Garcia-Bellido: *Scleritome animals from the Early Cambrian of Australia: disparity, affinities and evolution*

11:30 - 11:45

Huaqiao Zhang: *Recent studies on the Fortunian (lowermost Cambrian) cycloneuralians from South China*

11:45 - 12:00

Jean-Bernard Caron & Cédric Aria: *Arm-waving, tough and spiny: hopeful "Collins" monsters from the Burgess Shale of British Columbia*

12:00 - 12:15

Peiyun Cong, Gregory Edgecombe, Allison Daley, Stephen Pates & Xianguang Hou: *Revisiting the Chengjiang radiodonts after two decades of silence*

Session S17: Fossils and Recent, molecules & morphology: dialogs in phylogenetics

G. Billet, N. Puillandre, G. Giribet

Amphitheatre 34B

Chair: Guillaume Billet

08:30 - 09:00

Robert Asher: Keynote: *"The One Tree": Testing for bias in paleontological systematics*

09:00 - 09:15

Roland Sookias: *Improved phylogenetic inference from morphology: data from recent crocodilians*

09:15 - 09:30

Leah Callender-Crowe & Robert Sansom: *Homoplasy and correlation of morphological characters in birds and reptiles relative to molecular phylogeny*

09:30 - 09:45

Márton Rabi: *Morphology and homoplasy down-weighting performs selectively across turtle clades in combined molecular phylogenetic analyses*

09:45 - 10:00

Thomas Halliday, Mario Dos Reis, Asif Tamuri, Henry Ferguson-Gow, Ziheng Yang & Anjali Goswami: *High ratios of morphological: molecular evolutionary rate post-dating the origin of crown Placentalia*

10:00 - 10:15

Tobias Andermann, Rachel Warnock, Alexandra Gavryushkina, Tanja Stadler, Alexandre Antonelli & Daniele Silvestro: *Estimating diversity and diversification using fossil occurrence data*

10:15 – 10:45

Coffee break

Chair: Nicolas Puillandre

10:45 - 11:15 **Ross Macphee**, Samantha Presslee, Graham Slater & Matthew Collins: *Keynote: Proteomics and systematics in paleontology-going backward, looking forward*

11:15 - 11:30

Isaac Casanovas-Vilar, Joan Garcia-Porta, Josep Fortuny, Oscar Sanisidro, Jérôme Prieto, Marina Querejeta, Sergio Llácer, Federico Bernardini, Josep M. Robles & David M. Alba: *First skeleton of a flying squirrel and a new time-calibrated phylogeny of the group combining molecular and morphological data*

11:30 - 11:45

Sérgio Ferreira Cardoso, Guillaume Billet, Philippe Gaubert, Frédéric Delsuc & Lionel Hautier: *Patterns of morphological variation of the skull in extant Manidae (Pholidota) and phylogenetic implications for extinct pangolins*

11:45 - 12:00

Pablo A. Goloboff, **Diego Pol**, Michael Pittman & Xing Xu: *On the use of the Mkv model for inferring phylogenies from discrete morphological data*

12:00 - 12:30

Robert Pyron: *Keynote: Novel approaches for phylogenetic inference from morphological data and total-evidence dating in squamate reptiles (lizards, snakes and amphisbaenians)*

Session S19: How to build a palaeontological collection: expeditions, excavations, exchanges - E. Buffetaut, I. Podgorny

Room 109 – 1st floor – Towers 44-45

Chair: Eric Buffetaut, Irina Podgorny & Delphine Angst

08:30 - 08:45

Eric Buffetaut, Irina Podgorny & Maria Margaret Lopes: *Introduction*

08:45 - 09:00

Marco Tamborini: *Marketing paleontology: Collections between knowledge production and communication*

09:00 - 09:15

Mariana F. Waligora: *Museums and scientific exchanges in the global south. The fossil genus *Glossopteris* and some academics of the continental drift theory, 1915-1940*

09:15 - 09:30

Eric Buffetaut: *A Frenchman in Patagonia: the palaeontological expeditions of André Tournouër (1898-1903)*

09:30 - 09:45

Virginia Vanni, Maria G. Belcastro & Federico Fanti: *The South American Mammals collection at the Museo Geologico Giovanni Capellini (Bologna, Italy)*

09:45 - 10:00

Delphine Angst, Eric Buffetaut & Jérôme Tabouelle: *Paul Carié and the dodo: unexpected new specimens*

Session S23: Life in the time of Pangaea: volcanism, warming, anoxia, acidification and extinction - A.M. Dunhill, D.P.G. Bond, P.B. Wignall

Amphitheatre 44

Chair: Alexander M. Dunhill

08:45 - 09:15

Laurence Percival: *Keynote: The impact of Large Igneous Province volcanism on Pangaeon life*

09:15 - 09:30

Mark Puttick, Alexander Dunhill, Benjamin Mills, Rachel Warnock, Daniele Silvestro, David Bond & Paul Wignall: *Searching for mass extinction drivers: common cause or lost cause?*

09:30 - 09:45

Olga Kossovaya, David P. G. Bond & Tatiana Filimonova: *Late Cisuralian and Late Guadalupian ecological events: biotic and sedimentological evidence from different climatic zones in the Urals, Timan and South Primorye (Russia)*

09:45 - 10:00

David P.G. Bond & Paul B. Wignall: *The shallow-water Permian-Triassic extinction record in western Tethys (Hungary and Turkey): evidence for ocean acidification or marine anoxia?*

10:00 - 10:15

Wenchao Shu, Jinnan Tong, Michael Benton, Li Tian, Daoling Chu, Jianxin Yu & Wenwei Guo: *Limuloid trackways from the Permian-Triassic continental successions of North China*

10:15 - 10:45

Coffee break

Chair: David P. G. Bond

10:45 - 11:15

William Foster, Martin Aberhan & Maria Mutti: *Keynote: The role of ocean acidification during the latest Permian mass extinction event*

11:15 - 11:30

Xu Dai, Haijun Song, Paul B. Wignall, Enhao Jia, Ruoyu Bai, Fengyu Wang, Jing Chen & Li Tian: *Rapid biotic rebound during the late Griesbachian indicates heterogeneous recovery patterns after the Permian-Triassic mass extinction*

11:30 – 12:00

Yadong Sun, Michael Joachimski, Sylvain Richoz & Leopold Krystyn: Keynote: Oceanic anoxia during the Carnian Humid Episode

12:00 - 12:15

Massimo Bernardi & Michael J. Benton: *The Carnian Pluvial Episode linked to the diversification of dinosaurs and the origin of modern terrestrial vertebrate faunas*

12:15 - 12:30

Ekaterina Larina, David Bottjer, Frank Corsetti, William Berelson, Joyce Yager & Joshua West: *Paleoenvironmental and paleoecological trends leading up to the end-Triassic mass extinction event at Ferguson Hill, Nevada.*

Session S24: Macroecology and the fossil record - G. Escarguel, E. Fara, S. Fritz

Amphitheatre 34A

Chair: Susanne Fritz

08:15 - 08:30

Emmanuel Fara, Gilles Escarguel & Susanne Fritz: *Introduction to the session*

08:30 - 08:45

Yasuhara Moriaki, Derek Tittensor, Helmut Hillebrand & Boris Worm: *Combining macroecology and palaeoecology in understanding biodiversity: microfossils as a model*

08:45 - 09:00

Adam Tomasovych: *Testing the efficiency of isotherm tracking by marine bivalves and brachiopods*

09:00 - 09:15

Luke Strotz, Erin Saupe, Julien Kimmig & Bruce Lieberman: *Metabolic rates, climate and macroevolution: A case study using Neogene molluscs*

09:15 - 09:30

Carl Reddin, Adam Kocsis & Wolfgang Kiessling: *Climate change and the latitudinal selectivity of ancient marine extinctions*

09:30 - 09:45

Emmanuel Fara, Axelle Zacaï, Clotilde Hardy, Jean-Louis Dommergues, Christian Meister, Arnaud Brayard, Gilles Escarguel, Rémi Laffont, Pascal Neige & Bruno Vrielynck: *Exploring macroevolutionary and macroecological patterns using early Pliensbachian ammonites from the western Tethys*

09:45 - 10:00

Axelle Zacaï, Arnaud Brayard, Rémi Laffont, Jean-Louis Dommergues, Christian Meister & Emmanuel Fara: *Rapoport effect and the climatic variability hypothesis in Early Jurassic ammonites*

10:00 - 10:15

Gwen Antell, Wolfgang Kiessling, Martin Aberhan & Erin Saupe: *Geographic distributions of benthic invertebrate species are diversity-dependent across the Phanerozoic*

10:15 - 10:45

Coffee break

Chair: Gilles Escarguel

10:45 - 11:00

John Orcutt: *Where are Australia's bears and America's antechinus? Ecomorphology and convergence in past and present predator guilds*

11:00 - 11:15

Fernando Blanco, Ana Rosa Gómez Cano, Juan L. Cantalapiedra, Iris Menéndez, Lawrence Flynn & Manuel Hernandez Fernandez: *Move out or die: Climate change driven metacommunity dynamics during the late Miocene*

11:15 - 11:30

Kate Lyons, Amelia Villaseñor & Felisa Smith: *The role of functional traits in mammalian community structure across the Pleistocene-Holocene transition*

11:30 - 11:45

Corentin Gibert & Gilles Escarguel: *Macroecological analysis of Cenozoic terrestrial mammals in North America*

11:45 - 12:00

Jere Lipps: *The Signor-Lipps Effect in macroecology and evolution*

12:00 - 12:15

Adam Kocsis, Carl Reddin & Wolfgang Kiessling: *The biogeographic imprint of mass extinctions*

12:15 - 12:30

Mark Puttick, Thomas Guillaume & Matthew Wills: *Macroevolution through mass extinctions*

Session S29: Palaeobiodiversity of Southeast Asia H. Tong, V. Suteethorn, J. Claude

Room 109 – 1st floor – Towers 44-45

Chair: Julien Claude

10:45 - 11:00

Eric Buffetaut: *The scientific career of Father Henri Fontaine*

11:00 - 11:15

Hao Huang, Xiaochi Jin, Jianbin Zheng, Haifeng Wang & Yan Zhen: *Fusulinids from the Changning-Menglian Belt, western Yunnan, China and their paleogeographic implications*

11:15 - 11:30

Chatchalerm Ketwetsuriya & Alexander Nützel: *Permian gastropods in Thailand: Implications for diversity and palaeobiogeography in Southeast Asia*

11:30 - 11:45

Anisong Chitnarin, Sylvie Crasquin, Marie-Béatrice Forel & Prachya Tepnarong: *Early to Middle Permian ostracods (crustaceans) of Indochina terrane, central and northeastern Thailand: implication for palaeobiogeography*

11:45 - 12:00

Prachya Tepnarong, Anisong Chitnarin, Patteera Ketmuangmoon & Marie-Béatrice Forel: *Middle Triassic ostracods (Crustacea) from northern Thailand: first insight into their diversity and paleoenvironmental significance*

12:00 - 12:15

Simon Schneider, David Shaw & Tian Ying: *The long-lived Lake Nanning and its endemic and non-endemic fossil biota*

12:15 - 12:30

Gilles Cuny, Yu-He Teng, Uthumporn Deesri, Suchada Khamha, Jinyou Mo, Masatoshi Sone, Suravech Suteethorn & Varavudh Suteethorn: *Freshwater hybodont sharks as biostratigraphic tools for the Early Cretaceous of Southeast Asia*

Session S31: Palaeobiodiversity and evolutionary history of vertebrates in Africa - N. Jalil, E. Gheerbrant, A. Chinsamy-Turan, E. Seiffert

Amphitheatre 55B

Chair: Nour-Eddine Jalil & Anusuya Chinsamy-Turan

08:45 - 09:00

Welcoming and Introduction

09:00 - 09:15

Michael Day & Bruce Rubidge: *New perspectives on the homogeneity of the Tapinocephalus assemblage zone of the Main Karoo Basin, South Africa*

09:15 - 09:30

Kévin Rey, Michael Day, Romain Amiot, Jean Goedert, Christophe Lécuyer, Judith Sealy & Bruce Rubidge: *Stable isotope record implicates aridification in late Guadalupian mass extinction*

09:30 - 09:45

Julien Benoit, Paul Manger, Vincent Fernandez & Bruce Rubidge: *The origin of hair and whiskers as inferred from palaeoneurology of South African non-mammalian Synapsida*

09:45 - 10:00

Maxime Lasseron, Ronan Allain, Emmanuel Gheerbrant, Hamid Haddoumi, Nour-Eddine Jalil, Jean-Claude Rage & Samir Zouhri: *New data on the microvertebrate fauna from the Jurassic-Cretaceous site of Ksar Metlili (Anoual Syncline, Eastern Morocco): significance for African and Gondwanan vertebrate evolution*

10:00 - 10:15

Matteo Fabbri, Roger Benson, Diego Pol, Andrew Orkney, Cristiano Dal Sasso, Simone Maganuco, Samir Zouhri & Nizar Ibrahim: *Fish-eating habits in spinosaurs are shaped by heterochrony and bone microstructure*

10:15 - 10:45

Coffee break

Chair: Emmanuel Gheerbrant

10:45 - 11:00

Raymond Rogers, David Krause, Kristina Curry Rogers, Patrick O'Connor, Joseph Sertich, Joseph Groenke & Sara Burch: *Taphonomy of the Maevarano Formation vertebrate assemblage: life and death in the Late Cretaceous of Madagascar*

11:00 - 11:15

Kristina Curry Rogers, Zoe Kulik, Megan Whitney & Hoai-Nam Bui: *Titanosaur life history: Insights from Rapetosaurus krausei (Maevarano Formation, Madagascar)*

11:15 - 11:30

Kierstin Rosenbach, Iyad Zalmout & Jeffrey Wilson: *Three-dimensionally preserved pterosaur material from the Late Cretaceous of Afro-Arabia provides insight into pterosaur flight*

11:30 - 11:45

Floréal Solé, Corentin Noiret, Delphine Desmares, Sylvain Adnet, Thierry De Putter, Florias Mees, Johan Yans, Thomas Steeman, Stephen Louwye & Thierry Smith: *Reassessment of historical sections from the Paleogene marine margin of the Congo Basin reveals the absence of Danian deposits*

11:45 - 12:00

Erik Seiffert, Hesham Sallam & Sanaa El-Sayed: *Presence of Namalestes (Todralestidae?) in the early Priabonian of Egypt*

12:00 - 12:15

Marc Godinot, Brigitte Senut & Martin Pickford: *A primitive adapid (Mammalia, Primates) in the Lutetian of Namibia and primate dispersals from Asia to Africa*

12:15 - 12:30

Patrick Arnold: *Early burst or gradual divergence? – Patterns of body size evolution in fossil and extant Macroscelidea (Afrotheria)*

Session S36: The Devonian: life, environments and time - J. Marshall, L. Slavik, C. Brett

Amphitheatre 55A

Chair: Carlton E. Brett

08:30 - 08:45

John E. Marshall, Carlton E. Brett & Ladislav Slavík: *Introduction and welcome*

08:45 - 09:00

Elizabeth Dowding & Malte Ebach: *An interim Devonian bioregionalisation*

09:00 - 09:15

Cameron Penn-Clarke: *The rise and fall of the Malvinokaffric Realm in South Africa*

09:15 - 09:30

David Horne & Sylvie Crasquin: *The palaeopsychrosphere in the Devonian*

09:30 - 09:45

Aneta Hušková & Ladislav Slavík: *Diversity of the Lower Devonian icriodontids from the Prague Synform*

09:45 - 10:00

Ladislav Slavík: *The Pragian/Emsian boundary in the Prague Synform: possibilities and constraints for the boundary stratotype*

10:00 - 10:15

José I. Valenzuela-Ríos, Peter Carls, Carlos Martínez-Pérez & Jau-Chyn Liao: *Conodont sequences spanning the Pragian/Emsian transition (Lower Devonian) in NE Spain (Pyrenees and Iberian Chains) and its relevance for the redefinition of the base of the Emsian*

10:15 - 10:45

Coffee break

Chair: John E. Marshall

10:45 - 11:00

José I. Valenzuela-Ríos, Michael A. Murphy & Peter Carls: *New insights on the Pedavis (Conodonta) Apparatus*

11:00 - 11:15

Jianfeng Lu, José I. Valenzuela-Ríos, Chengyuan Wang, Jau-Chyn Liao & Yi Wang: *Emsian (Lower Devonian) conodonts from the Lufengshan section (Guangxi, South China)*

11:15 - 11:30

Ulrich Jansen: *New data on evolution and palaeobiogeography of Lower Devonian brachiopods from the Rhenish Massif (Germany)*

11:30 - 11:45

Cameron Penn-Clarke: *Palaeoenvironments and sequence analysis of the Early-Middle Devonian Bokkeveld Group of South Africa*

11:45 - 12:00

Mhairi Reid, Wendy Taylor, Carlton E. Brett & Emese Bordy: *3D Taphonomic analysis using micro CT of an ophiuroid-stylophoran assemblage from the Lower Devonian Bokkeveld Group, South Africa*

12:00 - 12:15

Zivile Zigaite-Moro, Teresa Jeffries, Alberto Perez-Huerta, Alexander Fadel, Daniel Goujet, Henning Blom & Per E. Ahlberg: *Devonian vertebrates from Andrée Land, Spitsbergen: diversity and palaeoenvironments*

Session S40: Vertebrate palaeophysiology J. Cubo, A.K. Huttenlocker

Room 107 – 1st floor – Towers 44-45

Chair: Jorge Cubo

10:45 - 11:00

Armand de Ricqlès: *Introduction to the Symposium Palaeophysiology: from a semantic paradox to a proper field of research*

11:00 - 11:15

Daniel Warren, Dean Odegard, Michael Sonnenfelt, Gary Bledsoe Gary, Sarah Keenan & Craig Hill: *Bone as a buffer in Permo-Carboniferous tetrapods: Insights from physiological studies of extant turtles*

11:15 - 11:30

Christine Janis: *Acid-base regulation in early tetrapods: a possible function of sculptured dermal bone*

11:30 - 11:45

Torsten Scheyer, Julia Desojo & Ignacio Cerda: *Bone histology of shell bones and dermal ossifications with implications for the palaeophysiology of turtles and archosauriforms*

11:45 - 12:00

François Clarac, Vivian de Buffrénil, Jorge Cubo & Alexandra Quilhac: *The physiological roles of the dermal skeleton in the pseudosuchian transition to the amphibious ectothermic lifestyle: Heat transfers when basking and acid-base balance during apnea.*

12:00 – 12:15

Lucas Legendre: *Phylogenetic comparative methods and paleobiological inference of physiological traits*

12:15 – 12:30

Adam K. Huttenlocker: *Applications of CPL microscopy to characterize diverse bone tissue textures in basal Amniota*

Session S41: XX1st Century palaeohistology of mineralized tissue M. Rücklin, G. Cuny, D. Germain, S. Sanchez (continuing)

Room 107 – 1st floor – Towers 44-45

Chair: Sophie Sanchez

08:30 - 09:00

Alexandra Houssaye: *Keynote: Patterns and processes of the convergent microanatomical and histological traits in the land-water transition*

09:00 - 09:15

Martin Rücklin, Floortje Mossou & Philip Donoghue: *Sclerochronology of dental and dermal skeletal organ systems in deep-time*

09:15 - 09:30

Koen Stein, Tom Hübner, Shoji Hayashi, Yuri Bolotski, Ivan Bolotski, Philippe Claeys & Pascal Godefroit: *Osteohistology sheds light on the origin of high growth rates in Iguanodontia*

09:30 - 09:45

Huali Chang, Xu Li, Junchang Lü, Songhai Jia, Xingliao Zhang & Jiming Zhang: *New material of Huanghetitan ruyangensis Lü et al., 2009 and the preliminary study of bone histology*

09:45 - 10:00

Teresa Calderón, Daniel DeMiguel & Meike Köhler: *Bone histology and growth of deer: preliminary results from bone histology*

10:00 - 10:15

General discussion

Tuesday July, 10th p.m.

Sessions S06, S12, S17, S20, S23, S28, S29, S31, S36, S40

Session S06: Biominerals through time: evolution, taphonomy and traces in the geological record A.H. Knoll, K. Benzerara, S. Bernard (continuing)

Room 105 – 1st floor – Towers 44-45

Chair: Sylvain Bernard

14:00 - 14:15

Lucia Angiolini, Karem Azmy, Giancarlo Capitani, Gaia Crippa, Giovanna Della Porta, Erika Griesshaber, Dave Harper, Melanie Leng, Renato Posenato & Mike Stephenson: *Why Carboniferous Gigantoprotectini grew so large and thick shelled? A possible explanation for gigantism in fossils.*

14:15 - 14:30

Kei Sato: *Shell microstructural evolution of protobranch bivalves; with a focus on the nacre-loss event*

14:30 - 14:45

Hao Yun, Xingliang Zhang, Glenn Brock, Luoyang Li & Guoxiang Li: *Sclerite microstructure and aragonite biomineralization in problematic Cambrian chancelloriids*

14:45 - 15:00

Luoyang Li, Christian B. Skovsted, Xingliang Zhang, Bing Pan, Hao Yun & Guoxiang Li: *Homologous shell microstructures in Cambrian hyoliths and molluscs*

15:00 - 15:15

Karim Benzerara, Margot Coutaud, Marjorie Etique, Nithavong Cam, Feriel Skouri Panet, Celine Ferard & Melanie Poinot: *Can fossil traces of intracellular carbonates formed by cyanobacteria be found in the geological record?*

15:15 - 15:30

Adiel Klompaker, Roger Portell, Matus Hyznyn, Shane Fussell, Aaron Klier, Raymond Tejera, Clément Jauvion, Sylvain Charbonnier & Sten Jakobsen: *Muscles and muscle scars in fossil malacostracan crustaceans*

Session S12: Early animal life - J. Vannier, J.B. Caron (continuing)

Great Amphitheatre of Muséum (GAM) in Jardin des Plantes

Chair: Jean-Bernard Caron

14:00 - 14:15

Stephen Pates & Allison Daley: *Diversity and disparity of radiodonts from the USA*

14:15 - 14:30

Cédric Aria, Fangchen Zhao & MaoYan Zhu: *Basal Cambrian fossils fill a gap in the evolution of terrestrial euarthropods*

14:30 - 14:45

Joseph Moysiuk & Jean-Bernard Caron: *Burgess Shale fossils shed light on the agnostid problem*

14:45 - 15:00

Dongjing Fu, Javier Ortega-Hernandez, Allison Daley & Xingliang Zhang: *Anamorphic development and extended parental care in a 520 million-year-old stem-group euarthropod from China*

15:00 - 15:15

Brigitte Schoenemann: *The functioning of a trilobite visual system more than half a billion years ago*

15:15 - 15:30

Jean Vannier, Cédric Aria, Rod Taylor & Jean-Bernard Caron: *Waptia fieldensis Walcott, a mandibulate arthropod from the middle Cambrian Burgess Shale*

15:45 - 16:15

Coffee break

Chair: Jean Vannier

16:15 - 16:30

Qiang Ou, Jean Vannier, Xianfeng Yang, Degan Shu, Jian Han, Dongjing Fu & Georg Mayer: *Trade-offs in brood care and reproduction of Cambrian waptiid pancrustaceans*

16:30 - 16:45

Javier Ortega-Hernandez, Dayou Zhai, Joanna Wolfe, Xianguang Hou & Yu Liu: *The Early Cambrian origin of Pancrustacea revealed by micro-computed tomography*

16:45 - 17:00

Timothy Topper, Guo Junfeng, Sébastien Clausen, Christian Skovsted & Zhifei Zhang: *A stem group echinoderm from the basal Cambrian of China*

17:00 - 17:15

Yujing Li, Mark Williams, Sarah Gabbott, Peiyun Cong, Ailin Chen & Xianguang Hou: *Reevaluation of the morphology and affinities of the enigmatic vetulicolian animal Yuyuanozoon magnificissimi, Early Cambrian Chengjiang Lagerstätte, South China*

17:15 - 17:30

Fangchen Zhao: *The distribution and palaeoecology of Cambrian Burgess Shale-type faunas in South China*

17:30 - 17:45

Karma Nanglu & Jean-Bernard Caron: *Diversity and structure of the middle Cambrian Marble Canyon paleocommunity, Burgess Shale, British Columbia*

Session S17: Fossils and Recent, molecules & morphology: dialogs in phylogenetics - G. Billet, N. Puillandre, G. Giribet (continuing)

Amphitheatre 34B

Chair: Gonzalo Giribet

14:00 - 14:15

Christoph Gierl, Martin Dohrmann & Bettina Reichenbacher: *A new gobiiform phylogeny - integration of morphological and molecular data*

14:15 - 14:45

Gregory Edgecombe: *Keynote: Fossils, molecular dating and arthropod terrestrialisation*

14:45 - 15:00

Malcolm Sanders, Didier Merle, Michel Laurin, Céline Bonillo & Nicolas Puillandre: *Frog shells through time: a dialogue between mitogenomics and palaeontological data*

15:00 - 15:30

Luke Parry, Yang Zhao, Jakob Vinther, Fan Wei, Emily Green, Pisani Davide, Xianguan Hou, Peiyun Cong & Gregory Edgecombe: *Keynote: A Cambrian weird wonder suggests a sessile, filter feeding, polyp-like origin for ctenophores*

15:45 - 16:15

Coffee break

Session S18: Functional morphology of the cranium in vertebrates - C. Pfaff, J. Kriwet

Amphitheatre 34B

Chair: Cathrin Pfaff & Jürgen Kriwet

16:15 - 16:30

Fabien Lafuma, Julien Clavel, Ian Corfe & Nicolas Di-Poi: *Independent evolution of multicuspidness precedes the acquisition of plant consumption in squamates*

16:30 - 16:45

Jürgen Kriwet, John Cawley & Giuseppe Marramà: *Predicting competition between †Pycnodontiformes and Ginglymodi (Osteichthyes, Neopterygii) through geologic time based on quantitative analyses of lower jaw features*

16:45 - 17:00

Cathrin Pfaff: *Working in 3D space – 3D measurements vs. 3D landmarks in functional morphological analyses of the inner ear of vertebrates*

17:00 - 17:15

James Neenan, Kimberley Chapelle & Jonah Choiniere: *Massospondylus inner ear ontogeny suggests a decoupled form-function relationship with locomotory performance in dinosaurs*

17:15 - 17:30

Charlène Selva, Sandrine Ladevèze, Damien Germain, Romain David & Stéphane Peigné: *Can the inner ear morphology bring clues to the hypothesis of a survival of fossorial therapsids during crises?*

17:30 - 17:45

Julia Schwab, Jürgen Kriwet & Cathrin Pfaff: *Extinct and extant predators – hunting style reconstruction and phylogenetic distinction of carnivorans based on the vestibular system*

17:45 – 18:00

Benjamin Moon, Michael Benton & Matt Williams: *Morphofunctional diversity in Toarcian (Early Jurassic) ichthyosaurs*

Session S20: Intimate interactions - O. Béthoux, N. Robin, T. Wappler

Amphitheatre 45A

Chair: Olivier Béthoux

14:00 - 14:45

Kenneth De Baets, Timothy Littlewood & Luke Parry: *Keynote: The worm's turn: constraining the deep origin and evolution of parasitism with fossil evidence*

14:45 - 15:00

Corentin Loron, Robert Rainbird, Elizabeth Turner, J. Greenman & Emmanuelle Javaux: *Evidence for early predation in Arctic Canada and implications for the evolution of Eukaryotes*

15:00 - 15:15

Xiaoya Ma, Peiyun Cong, Mark Williams, David Siveter, Derek Siveter, Sarah Gabbott, Dayou Zhai, Tomasz Goral, Gregory Edgecombe & Xianguang Hou: *The earliest evidence of metazoan symbiosis*

15:15 - 15:30

Caroline Buttler & Paul Taylor: *Symbioses between bryozoans and primary and secondary occupants of gastropod shells*

15:30 - 15:45

Ninon Robin, Giuseppe Marramà, Ronald Vonk, Jürgen Kriwet & Giorgio Carnevale: *Eocene isopods on electric rays: tracking ancient biological interactions in a complex fossil record*

15:45 - 16:15

Coffee break

Chair: Ninon Robin

16:15 - 16:30

Clément Jauvion, Denis Audo, Sylvain Bernard & Sylvain Charbonnier: *Polychelidan lobsters from La Voulte: first evidence of Eucarida brood care in the fossil record*

16:30 - 16:45

Tomasz Baumiller & Forest Gahn: *Biotic interactions between platyceratid gastropods and crinoids: a review and new insights*

16:45 - 17:00

Elizabeth Petsios, Tyler Carrie, Roger Portel & Michal Kowalewski: *Trends in drilling predation and parasitism on echinoids during the mesozoic marine revolution*

17:00 - 17:15

Torsten Scheyer, Massimo Delfino, Nicole Klein, Nancy Bunbury, Frauke Fleischer-Dogley & Dennis Hansen: *Trophic interactions between larger crocodylians and giant tortoises on Aldabra Atoll, Western Indian Ocean, during the Late Pleistocene*

17:15 - 17:30

Ofir Katz: *Silica phytoliths in angiosperms: Phylogeny, early evolutionary history, and a possible dinosaur connection*

17:30 - 17:45

Esther Pinheiro, Roberto Iannuzz & Leandro Duarte: *Spatio-temporal distribution of herbivory in the Permian flora from Gondwana*

Session S23: Life in the time of Pangaea: volcanism, warming, anoxia, acidification and extinction - A.M. Dunhill, D.P.G. Bond, P.B. Wignall (continuing)

Amphitheatre 44

Chair: Paul B. Wignall

14:00 - 14:30

Jed Atkinson, Paul B. Wignall, Tracy Aze & Robert Newton: *Keynote: Brobdingnagian Bivalves: Body size increase within various Lower Jurassic bivalve molluscs.*

14:30 - 14:45

Dorit Korngreen, Tami Zilberman & Yehudit Harlavan: *Volcanism, C-cycle perturbations and Earth-Life transition reciprocity; the Triassic-Jurassic boundary as a case study in the Levant region*

14:45 - 15:00

Alexander Dunhill, Sandro Azaele, Erin Saupe, William Foster, James Sciberras & Richard Twitchett: *Modelling extinction during Mesozoic hyperthermal events*

15:00 - 15:15

Simon Boivin, Raphaël Vasseur, Bernard Lathuilière, Iuliana Lazar, Christophe Durlet, Rowan Martindale, Khalid El Hmidi & Rossana Martini: *A little walk between Liassic sponges and corals*

15:15 - 15:30

Patrícia Rita, Kenneth De Baets & Luís Duarte: *The effect of the Pliensbachian-Toarcian crisis on body size: the case of Peniche section belemnites (Lusitanian Basin, Portugal)*

15:30 - 15:45

Patrícia Rita, Kenneth De Baets & Martina Schlott: *Differences in body size distributions between Toarcian belemnite battlefields*

15:45 - 16:15

Coffee break

Chair: Alexander M. Dunhill

16:15 - 16:45

Rowan Martindale, Hannah Brame, Nicholas Ettinger, Stéphane Bodin, Raphaël Vasseur, Bernard Lathuilière, Jan Danisch & Lahcen Kabiri: *Keynote: The record of Early Jurassic (Pliensbachian-Toarcian) lithotid bivalve and coral reef collapse, survival, and recovery from the Central High Atlas of Morocco*

16:45 - 17:00

Sam Slater, Richard Twitchett, Silvia Danise & Vivi Vajda: *Abrupt ecosystem changes during an Early Jurassic (Toarcian) global warming episode*

17:00 - 17:15

Raphaël Vasseur, Simon Boivin, Bernard Lathuilière, Iuliana Lazar, Christophe Durlet, Rowan Martindale, Stéphane Bodin & Khalid El Hmidi : *Variations in coral faunas across the Pliensbachian-Toarcian crisis: a diachronous event?*

17:15 - 17:30

Shenghui Deng, Yuanzheng Lu, Yi Zhao, Ru Fan, Xueying Ma & Xin Li: *A warming and aridification event in terrestrial ecosystem of North China during the early Jurassic, possibly linked to the Toarcian Oceanic Anoxic Event*

Session S28: New trends in biostratigraphy - Stratigraphic section (SGF) session - E. Nardin, D. Desmares, J. Palfy

Amphitheatre 34A

Chair: Delphine Desmares & Elise Nardin

14:00 - 14:30

Luis O'Dogherty, Peter Baumgartner & Špela Goričan: *Keynote: Carbon isotope stratigraphy: a tool for chronostratigraphic calibration of Middle–Upper Jurassic radiolarian-bearing rocks of Tethys*

14:30 - 14:45

Spela Gorican, Luis O'Dogherty, Peter Baumgartner, Elizabeth Carter & Atsushi Matsuoka: *Mesozoic radiolarian biochronology – current status and future directions*

14:45 - 15:00

Atsushi Matsuoka: *The Jurassic/Cretaceous boundary and phyletic analysis of radiolarian Loopus-Pseudodictyomitra and Vallupus lineages*

15:00 - 15:15

József Pálffy, Flóra Németh & Dominika Szűcs: *Testing the global correlation and resolution of Early Jurassic ammonoid zonal schemes using quantitative biostratigraphic methods*

15:15 - 15:30

Markus Aretz: *Biostratigraphic makers for defining GSSP levels in the Carboniferous: how to make it a success?*

15:30 - 15:45

Poster presentations (2mn/poster)

15:45 - 16:15

Coffee break

Chair: Jozsef Palfy

16:15 - 16:30

Thomas Claybourn, Marissa Betts, Lars Holmer, Christian Skovsted, Timothy Topper & Glenn Brock: *Multiproxy chronostratigraphy of the Lower Cambrian Byrd Group, Central Transantarctic Mountains*

16:30 - 16:45

Fahad Ali, Sajjad Ahmad, Suleman Khan, Muhammad Hanif & Jin Qiang: *Palynostratigraphy and oceanic anoxic environmental study of the Toarcian-Bathonian age rocks, Chichali Nala, Central Punjab, Pakistan*

16:45 - 17:00

France Polette, David Batten, Florence Quesnel & Didier Néraudeau: *Synthesis of the palynological content of the Lower Cretaceous continental deposits in France: stratigraphic implications*

17:00 - 17:15

Raquel Sanchez Pellicer: *Late Cretaceous - Paleocene chronostratigraphy of the Gulf of Guinea: Evidences from dinoflagellate cysts*

17:15 - 17:30

Gloria Franceschetti, Lucia Rivero-Cuesta, Laura J. Cotton, Alina Iakovleva, Jerry J. Hooker, Laia Alegret, Jaume Dinarès-Turell, Stacy L. Yager, Richard H. Fluegeman & Simonetta Monechi: *The Bartonian Stage in the Alum Bay section (Hampshire Basin, UK) revisited: a multidisciplinary study*

17:30 - 17:45

Alexis Rojas-Bricen, Michele Azzarone, Daniel Edler, Joaquin Calatayud, Martin Rosvall, Michał Kowalewski & Daniele Scarponi: *Mapping network flows through sedimentary deposits based on fossil assemblages: A case study from the Quaternary of the Po Plain (Italy)*

17:45 – 18:00

Meriem Hichi, Najla Sekatni, Mohamed Gharbi & Ben Youssef Mohamed: *Biostratigraphic review of the synextensional Upper Aptian-Early Albian boundary from Sidi Salem-Messella structure (Northeastern of Tunisia)*

Session S29: Palaeobiodiversity of Southeast Asia - H. Tong, V. Suteethorn, J. Claude (continuing)

Room 109 – 1st floor – Towers 44-45

Chair: Haiyan Tong

14:00 - 14:15

Uthumporn Deesri, Siripat Kaikaew, Phornphen Chanthasit, Kamonlak Wongko & Lionel Cavin: *New data about the braincase of Thaiichthys (Holostei: Lepisosteiformes) from the Early Cretaceous of NE Thailand*

14:15 - 14:30

Chloé Olivier, Bernard Battail, Sylvie Bourquin, Camille Rossignol, Jean-Sébastien Steyer & Nour-Eddine Jalil: *New dicynodonts (Therapsida, Anomodontia) from the Early Triassic of Laos: implications for the tetrapod recovery after the Permian–Triassic mass extinction and the paleobiogeography of Southeast Asian Blocks*

14:30 - 14:45

Corentin Bochaton, Hubert Forestier, Prasit Auetrakulvit, Heng Sophady, Stéphane Frère, Christophe Griggo, Wilailuck Naksri, Julien Claude, Komsorn Lauprasert & Valéry Zeitoun: *Investigation of the occurrences of Monitor Lizards (Varanus sp.) from Late Pleistocene to Holocene in continental South-East Asia*

14:45 - 15:00

Suravech Suteethorn, Varavudh Suteethorn, Eric Buffetaut, Haiyan Tong, Uthumporn Deesri & Phornphen Chanthasit: *An exceptional Late Jurassic vertebrate assemblage from the Phu Kradung Formation of Phu Noi, NE Thailand*

15:00 - 15:15

Varavudh Suteethorn, **Eric Buffetaut**, Kamonrak Wongko, Suravech Suteethorn & Haiyan Tong: *Morphological diversity of spinosaurid teeth from the Pra Prong locality (Lower Cretaceous of eastern Thailand)*

15:15 - 15:30

Adun Samathi, Phornphen Chanthasit & Martin Sander: *Non-avian Theropod Dinosaurs in Thailand & Southeast Asia: Evolution and Paleobiogeography*

15:30 - 15:45

Romain Liard, Alexandre Trémeau, Tida Liard & Krishna Sutchu: *Ichnofossils from the Mesozoic lower formations of the Khorat Group: toward a better understanding of the continental ichnofacies from Thailand*

15:45 - 16:15

Coffee break

Chair: Gilles Cuny

16:15 - 16:30

Haiyan Tong, Julien Claude, Wilailuck Naksri, Varavudh Suteethorn, Suravech Suteethon, Jinyou Mo & Eric Buffetaut: *Palaeobiodiversity of Mesozoic turtles in Southeast Asia*

16:30 - 16:45

Wilailuck Naksri, Haiyan Tong, Pratueng Jintasakul, Varavudh Suteethorn & Julien Claude: *Cenozoic fossil tortoises of Southeast Asia: palaeobiogeographical implications*

16:45 - 17:00

Julien Claude, Prasit Auetrakulvit, Wilailuck Naksri, Corentin Bochaton, Valéry Zeitoun & Haiyan Tong: *Biodiversity decreasing in peninsular Southeast Asia: The message of Holocene turtles from the central plain of Thailand*

17:00 - 17:15

Olivier Chavasseau, Chit Sein, Hervé Bocherens, Faysal Bibi, Yaowalak Chaimanee, Jacob Maugoust & Jean-Jacques Jaeger: *The Khoratpithecus-bearing fauna from the Central Basin of Myanmar: faunal composition, biochronology and biogeographic affinities*

17:15 - 17:30

Kantapon Suraprasit, Yaowalak Chaimanee, Hervé Bocherens & Jean-Jacques Jaeger: *A possible glacial-interglacial stability of large mammal faunas in Southeast Asia*

17:30 - 17:45

Arnaud Filoux, Athiwat Wattanapituksakul, Carole Lespes, Jeremy Martin, Gaël Becam, Romain Liard, Cholawit Thongcharoenchaikit, Rainer Grün & Mathieu Duval: *The late Pleistocene (MIS 4) mammal assemblage of Tham Prakai Phet (Thailand): a new biochronological benchmark for mainland Southeast Asia*

17:45 – 18:00

Marian Reyes & Thomas Ingicco: *Zooarchaeology of small impoverished islands: Looking at microvertebrates from Bubog rockshelters (Ilin Island, Mindoro, Philippines)*

Session S31: Palaeobiodiversity and evolutionary history of vertebrates in Africa - N. Jalil, E. Gheerbrant, A. Chinsamy-Turan, E. Seiffert (continuing)

Amphitheatre 55B

Chair: Erik Seiffert

14:00 - 14:15

Rodolphe Tabuce, Mohammed Adaci, Hayet Khayati Ammar, Mustapha Bensalah, Essid El Mabrouk, M'hammed Mahboubi, Wissem Marzougui, Fateh Mebrouk, Laurent Marivaux & Rim Temani: *A dwarf among giants: Titanohyrax tantulus (Hyracoidea, Mammalia) from the Eocene of Chambi, Tunisia and Glib Zegdou, Algeria*

14:15 - 14:30

Lionel Hautier, Guillaume Guinot, Christophe Johnson, Raphaël Sarr & Rodolphe Tabuce: *New data on the evolution of Eocene proboscideans in Sub-Saharan Western Africa*

14:30 - 14:45

Samir Zouhri, Philip Gingerich, Najia Elboudali, Samira Sebti, Bouziane Khalloufi, Estelle Bourdon, Ayoub Amane, Jean-Claude Rage† & France de Lapparent de Broin: *Middle-Upper Eocene Archaeoceti whales from the Sahara Desert in Morocco*

14:45 - 15:00

Thalassa Matthews: *Biogeographic and climatic implications of Early Pliocene fossil frogs from Langebaanweg, west coast, South Africa*

15:00 - 15:15

Joshua Tyler & Faysal Bibi: *Investigating the role of competition and biotic interaction on the evolution of African bovids: A geometric morphometric & phylogenetic approach*

15:15 - 15:30

Fabrice Lihoreau, Raphaël Sarr, Dominique Chardon, Jean-Renaud Boisserie, Renaud Lebrun, Sylvain Adnet, Jeremy Martin, Bernard Sambou, Rodolphe Tabuce, Moustapha Thiam & Lionel Hautier: *The first Neogene terrestrial fauna from Senegal: a window on Pliocene western Africa history*

15:30 - 15:45

Jean-Renaud Boisserie: *Deciphering the drivers of Plio-Pleistocene evolution in an African rift valley: a plea for focusing research efforts on paleobiotic interactions*

15:45 - 16:15

Coffee break

Chair: Jean-Renaud Boisserie

16:15 - 16:30

Antoine Souron, Gildas Merceron & Jean-Renaud Boisserie: *Why the long teeth? Were changes in third molar morphology in Plio-Pleistocene African suids driven by climatic changes or by ecological niche partitioning? A case-study using Kolpochoerus*

16:30 - 16:45

Martin Pickford & Dominique Gommery: *Suidae (Mammalia, Artiodactyla) from Bolt's Farm Palaeokarst System (Plio-Pleistocene) South Africa*

16:45 - 17:00

Brian Kuhn, Dominique Gommery & Lazarus Kgasi: *The carnivore guild of Bolt's Farm, South Africa: Carnivore biodiversity in the Plio-Pleistocene*

17:00 - 17:15

Kari Prassack: *A bird's eye view of an evolving landscape at Olduvai Gorge, Tanzania*

Session S35: The conservation of palaeontological collections: challenge and perspectives - V. Rouchon

Room 105 – 1st floor – Towers 44-45

Chair: Véronique Rouchon & Alejandra Rojas

16:15 - 16:30

Giliane Odin, Oulfa Belhadj, Ronan Allain, Dario De Franceschi & Véronique Rouchon: *Conservation issues of pyrite-bearing lignitized woods: stymieing pyrite oxidation by combined bathing and drying processes*

16:30 - 16:45

Alejandra Rojas, Fernanda Cabrera & Andrea Corona: *Microenvironments to buffer the detrimental effects of temperature and relative humidity fluctuations in a fossil collection*

16:45 - 17:00

Yiying Deng & Junxuan Fan: *High resolution 720° panoramic visualization technology of outcrop and its application on the GBDB platform*

17:00 - 17:15

Jocelyn Falconnet, Elise Porez, Peter Massicard & Gaëlle Doitteau: *Digitization of major palaeontological collections: the E-RECOLNAT program in the Muséum National d'Histoire Naturelle (Paris) as an example*

17:15 - 17:30

Véronique Rouchon, Claudine Bugnon & Oulfa Belhadj: *Testing acidic treatments for use on fossil fish from the Sceltrich beds of Monte San Giorgio, Switzerland, middle Triassic*

17:30 – 18:00

Posters session, including brief presentations

Session S36: The Devonian: life, environments and time J. Marshall, L. Slavík, C. Brett (continuing)

Amphitheatre 55A

Chair: Ladislav Slavík

14:00 - 14:15

Borja Cascales-Miñana, Philippe Steemans, Thomas Servais, Kevin Lepot & Philippe Gerrienne: *The Lower Devonian Rhynie Chert plant Horneophyton: its implication for the early evolution of vascular plants*

14:15 - 14:30

Rainer Brocke, Walter Riegel, Carlton E. Brett, Christoph Hartkopf-Fröder, Olaf Lenz, Peter Königshof, Eberhard Schindler & Volker Wilde: *Palynology and microfacies of Middle Devonian leperditian-rich beds from the classical Eifel area (Germany)*

14:30 - 14:45

Eberhard Schindler, Monique Feist, Atike Nazik, Achim Wehrmann & Namik M. Yalçın: *First record of charophytes in the Devonian of Turkey (Central Taurides)*

14:45 - 15:00

Jau-Chyn Liao & Susana García-López: *Capturing the Kačák Episode (Middle Devonian) in the Palentine Domain (Cantabrian Mountains, NW Spain)*

15:00 - 15:15

Jau-Chyn Liao, José I. Valenzuela-Ríos, Catherine Girard & Raimund Feist: *Upper Givetian (Middle Devonian) Conodont sequences from the Spanish Central Pyrenees and the Montagne Noire (France) and their Biostratigraphic Correlation*

15:15 - 15:30

Xinsong Zhang, Jeff Over, Yiming Gong & Kunyuan Ma: *Restudy of the conodont genus Palmatolepis at the Lali section, South China*

15:45 - 16:15

Coffee break

Chair: Anne-Christine da Silva

16:15 - 16:30

Stijn Goolaerts, Sofie Gouwy, Kevin Houben, Marc-Aurèle Wynants & Xavier Devleeschouwer: *Ammonoids and anoxia from the Belgian Frasnian: the Carrière de Lompret section*

16:30 - 16:45

Dan Lü & Xueping Ma: *Small-sized brachiopods from the Upper Frasnian (Devonian) of central Hunan, China*

16:45 - 17:00

Li Qiao: *Biogeographic provinciality of brachiopod faunas and its relationship to Frasnian-Famennian mass extinction*

17:00 - 17:15

Lawrence Percival, Joshua Davies, David Selby, Urs Schaltegger, Michal Rakocinski, Grzegorz Racki, David Bond, Jorge Spangenberg, Thierry Adatte & Karl Föllmi: *The Late Devonian mass extinction: new geochemical and geochronological insights*

17:15 - 17:30

Jaleigh Q. Pier, Sarah Brisson & Andrew M. Bush: *Selectivity of the Lower Kellwasser Mass Extinction Event (Late Devonian) in the Appalachian Basin, U.S.A.*

17:30 - 17:45

Andrew M. Bush, Sarah Brisson, Jaleigh Q. Pier, James Beard, Michael Hren, Anjali Fernandes, James Kerr & Patrick Getty: *The Frasnian-Fammenian (Late Devonian) extinction event in shallow marine, siliciclastic paleoenvironments of the northern Appalachian Basin, USA*

Session S40: Vertebrate palaeophysiology - J. Cubo, A.K. Huttenlocker (continuing)

Room 107 – 1st floor – Towers 44-45

Chair: Adam Huttenlocker

14:00 - 14:15

Jennifer Botha-Brink, Marina Bento Soares & Agustin Martinelli Agustin: *Non-mammaliaform cynodont osteohistology and implications for the evolution of mammalian growth patterns*

14:15 - 14:30

Megan Whitney, Yuen Tse & Christian Sidor: *Comparative tusk histology of Lystrosaurus from the Early Triassic of South Africa and Antarctica shows pronounced seasonality*

14:30 - 14:45

Robert Brocklehurst: *Breathing life into dinosaurs: XROMM ventilation kinematics of extant archosaurs and reconstructing rib motion in fossils*

14:45 - 15:00

Jorge Cubo & Nour-Eddine Jalil: *Bone histology of Azendohsaurus laaroussii. Implications for the evolution of metabolic rates in Archosauromorpha*

15:00 - 15:15

Holly Woodward, Katie Tremaine, Scott Williams, John Horner & Nathan Myhrvold: *Hindlimb osteohistology reveals details of tyrannosaurid ontogeny and independently tests the Nanotyrannus hypothesis*

15:15 - 15:30

Edina Prondvai, Anick Abourachid, Ali Khabazi & Dominique Adriaens: *Altricial forelimbs? precocial hindlimbs: disparate growth and function in the ontogeny and evolution of avian locomotion*

15:30 - 15:45

Martin Sander, Tanja Wintrich, Corinna Fleischle, Shoji Hayashi, Alexandra Houssaye, Yasuhisa Nakajima: *The independent evolution of endothermy in Plesiosauria: evidence from their unique long bone histology*

15:45 - 16:15

Coffee break

Chair: Adam Huttenlocker

16:15 - 16:30

Philippe Janvier: *The heart of osteostracans*

16:30 - 16:45

Donald Davesne, François J. Meunier, Olga Otero, Matt Friedman & Roger B. J. Benson: *The evolution of acellular bone in teleosts: a new structure-function relationship in fish bone histology?*

16:45 - 17:00

Tomasz Owerkowicz, Kevin M. Middleton & Alfred W. Crompton: *Selective forces behind the evolution of respiratory turbinates in mammals and birds*

17:00 - 17:15

Alfred Crompton, Catherine Musinsky, Jose Bonaparte, Bhart-Anjan Bhullar & Tomasz Owerkowicz: *Speculations on the origin of the mammalian fauces: therians and monotremes compared*

17:15 - 17:30

Chloé Olivier, Alexandra Houssaye, Nour-Eddine Jalil & Jorge Cubo: *Palaeobiology of an extinct synapsid, the dicynodont Moghreberia nmachouensis (Therapsida: Anomodontia): new data on the origin and evolution of endothermy in synapsids.*

17:30 – 18:00

Kevin Padian: *Keynote: Inferring the physiological capacities of extinct vertebrates: methods, limits and framework*

Thursday July 12th, a.m.

Sessions: S03, S05, S09, S10, S13, S15, S16, S21, S36, S37, S39

Session S03: Back to the sea: from Late Palaeozoic to Cenozoic, the Tetrapod adventure - N. Bardet, V. Fischer, A. Houssaye, S. Jouve, O. Lambert, P. Vincent

Amphitheatre 45B

Chair: Nathalie Bardet

08:30 - 09:30

Christian de Muizon: *Keynote: When Nature is having fun: walrus-dolphins and aquatic sloths from the Neogene of Peru*

09:30 - 09:45

Antoine Verrière & Jörg Fröbisch: *Patterns of growth and ossification in the Early Permian clade Mesosauridae (Sauropsida; Parareptilia)*

09:45 - 10:00

Jun Liu, P. Martin Sander, Adun Samathi & Phornphen Chanthasit: *The earliest ichthyosaur from the middle Lower Triassic of Thailand*

10:00 - 10:15

Xue Wang, Da-Yong Jiang, Ryosuke Motani, Cheng Ji & Min Zhou: *A new species of Guizhouichthyosaurus (Ichthyosauria, Shastasauridae) from the Ladinian*

10:15 - 10:45

Coffee break

Chair: Stéphane Jouve, Olivier Lambert & Valentin Fischer

10:45 - 11:00

Márton Rabi: *Iterative evolution of pelagization in sea turtles*

11:00 - 11:15

Irena Burek: *Comparative cranial morphology of the Late Cretaceous protostegid sea turtle Desmatochelys lowii*

11:15 - 11:30

Mark T. Young, Julia Schwab, Stig Walsh, Lawrence Witmer, Yanina Herrera & Stephen L. Brusatte
The evolution of thalattosuchian crocodyliforms, neuroanatomical insights into the land-to-sea transition

11:30 - 11:45

Rémi Allemand, Alexandra Houssaye, Peggy Vincent & Nathalie Bardet: *Endocranial microtomographic study of marine reptiles (Plesiosauria and Mosasauroida) from the Turonian (Late Cretaceous) of Morocco: palaeobiological implications*

11:45 - 12:00

Travis Park & Natalie Cooper: *Inner ear evolution in odontocetes*

12:00 - 12:15

Rachel A. Racicot, Simon Darroch, Robert W. Boessenecker & Jonathan Geisler: *My head hertz: Hearing abilities in an early simocetid (Cetacea: Odontoceti) as reconstructed from microCT scans*

12:15 - 12:30

Camille Grohe, James Herrera & John Flynn: *The inner ear reveals patterns of adaptation to aquatic environment in carnivorous mammals: seals, sea lions, fur seals and walruses*

12:30 - 14:00

Lunch break

Session S05: Biodiversity changes through times: crisis and radiations - S. Crasquin, T. Adatte

Amphitheatre 44

Chair: Thierry Adatte

08:30 - 09:00

Douglas Erwin: *Keynote: Novelty, adaptive radiations and evolutionary diversification*

09:00 - 09:15

Björn Kröger, Christian Rasmussen & Franziska Franeck: *Discrepancy between Early Paleozoic trends in diversity and evolutionary rates*

09:15 - 09:30

Simona Rinkevičiūtė, Andrej Spiridonov, Sigita Radzevičius & Andrius Garbaras: *The impact of the Mulde bioevent (Lower Silurian) on Ostracode ecological dynamics*

09:30 - 09:45

Ralph Thomas Becker, Zhor Aboussalam & Sven Hartenfels: *The Frasnian-Famennian boundary mass extinction –widespread seismic events, the timing of climatic pulses, “pelagic death zones” and opportunistic survivals*

09:45 - 10:00

Jana Gliwa, Marie-Béatrice Forel, Sylvie Crasquin, Martin Schobben, Abbas Ghaderi & Dieter Korn: *Ostracod diversity and environmental conditions of the Aras Valley section (NW-Iran) during the end-Permian mass extinction*

10:00 - 10:15

Pauline Gunenser, Nicolas Goudemand & Gilles Escarguel: *What is a conodont species? The case of *Novispathodus ex gr. waageni**

10:15 - 10:45
Coffee break

Chair: Alexander Nützel

10:45 - 11:00

Yukio Isozaki: *Repeated extinctions by cosmoclimatological driver: GCR flux and global cooling*

11:00 - 11:15

Baran Karapınar & Alexander Nützel: *Diversity dynamics of slit band gastropods (order Pleurotomariida) at the Paleozoic - Mesozoic transition*

11:15 - 11:30

Mark MacDougall, Neil Brocklehurst & Jörg Fröbisch: *The morphological disparity of Parareptilia throughout their evolutionary history*

11:30 - 11:45

Jeffrey Thompson, Elizabeth Petsios, Amanda Godbold & Bottjer David: *The Permian-Triassic Macroevolutionary History of Echinoids*

11:45 - 12:00

David Ware, Dieter Korn, Arnaud Brayard & Claude Monnet: *Preliminary results of a morphometric analysis of Permo-Triassic ammonoid suture lines: morphogenetic and phylogenetic implications during a diversity bottleneck*

12:00 - 12:15

Chris Mays, Vivi Vajda, Stephen McLoughlin, Chris Fielding, Tracy Frank & Robert Nicoll: *Extinction, evolution and recovery of the Gondwanan flora through the Permian-Triassic biotic crisis in southern high palaeolatitudes, Australia*

12:15 - 12:30

Erin Saupe, Qiao Huijie, Alex Farnsworth, Yannick Donnadieu, Dan Lunt, Jean-Baptiste Ladant, Alexandre Pohl, Navjit Sagoo, Paul Valdes & Seth Finnegan: *Combined climate and ecological niche modelling predicts the relative severity of marine extinctions during three Phanerozoic episodes of climatic cooling*

12:30 - 14:00

Lunch break

Session S09: Coevolution of life and environments: integrating the palaeoecological, sedimentological and geochemical Records- L. Tackett, L. Tarhan

Amphitheatre 45A

Chair: Lidya Tarhan & Lydia Tackett

08:30 - 08:45

Sharad Master: *Oldest petee ridges, produced by desiccated microbial mats, in c. 3 Ga peritidal Pongola quartzites, South Africa*

08:45 - 09:00

Jérémie Aubineau, Abderrazak El Albani, Ernest Chi Fru, Armelle Riboulleau & Kurt Konhauser: *Unusual microbial mat-related structural diversity at 2.1 billion years old and implications for the Francevillian biota*

09:00 - 09:15

Wei Wang, Chengguo Guan, Yongliang Hu & Chuanming Zhou: *Spatial gradient of pyrite sulfur isotope in early and middle Ediacaran successions of South China*

09:15 - 09:30

James Gehling & Mary Droser: *Size matters in the Ediacara biota*

09:30 - 09:45

Gretchen O'Neil & Lydia Tackett: *The pioneering role of Precambrian bioturbators preceding the Cambrian fauna: a sedimentological and paleontological case study from the western United States*

09:45 - 10:00

Simon Darroch, Emily Smith, Marc Laflamme & Doug Erwin: *Ediacaran extinction and Cambrian explosion*

10:00 - 10:15

Tin-Wai Ng, Jin-Liang Yuan, Horng-Sheng Mii & Chih-Kai Chuang: *Possible characteristics of the Cambrian SPICE event on the North China Platform*

10:15 - 10:45

Coffee break

Chair: Lidya Tarhan & Lydia Tackett

10:45 - 11:00

André Desrochers & Jean-François Ghienne: *Incorporating palaeoecological, sedimentary and geochemical data to revisit the End-Ordovician mass extinction event*

11:00 - 11:15

Yuanyuan Zhang, Chao Ni, Yue Li & Yingyan Mao: *Recovery scenario of the benthic biota in the aftermath of the latest Ordovician events: cases from a near-shoal belt of the Upper Yangtze Platform, South China Block*

11:15 - 11:30

Le Yao, Xiangdong Wang & Markus Aretz: *Distribution and evolution of Carboniferous reefs from the shelves around the South China and North China blocks*

11:30 - 11:45

William Foster, Daniel Lehrmann, Meiyi Yu & Rowan Martindale: *Facies selectivity of benthic invertebrates in microbialites: implications for the "Microbialite Refuge" hypothesis*

11:45 - 12:00

Annaka Clement, Lydia Tackett, Kathleen Ritterbush, Yadira Ibarra, Samuel Marolt & Joel Schock:
Iron ooid forming environments in the aftermath of the End-Triassic mass extinction

12:00 - 12:15

Robert Jenkins, Midori Suzuki & So Watanabe: *Decaying process of marine vertebrates: how are the whale- and sea turtle-fall communities established?*

12:15 - 12:30

Francisco J. Rodríguez-Tovar, F. Javier Hernández-Molina, Heiko Huneke, Llave Estefania & Dorrik A. V. Stow: *Trace fossil infill: a tool to interpret bottom-current deposits*

12:30 - 14: 00

Lunch break

Session S10: Conservation palaeobiology and historical ecology of marine ecosystems- P.G. Albano, A. O'Dea, M. Zuschin

Room 105 – 1st floor – Towers 44-45

Chair: Aaron O'Dea

08:30 - 09:15

Jeremy Jackson: *Keynote: Where is the Conservation in Conservation Paleobiology?*

09:15 - 09:30

Gregory Dietl, Jansen Smith & Stephen Durham: *Conservation paleobiology and the psychological distance of climate change: A perspective from construal level theory*

09:30 - 09:45

Amanda Godbold, Jeffrey Thompson, Bottjer David, Shen Shuzhong & Charles Henderson: *Deep marine environments: a potential refuge during times of severe environmental stress*

09:45 - 10:00

Catalina Pimiento & John Griffin: *Megacene: the fate and function of marine megafauna from the Pliocene to the Anthropocene*

10:00 - 10:15

Michal Kowalewski & Carrie Tyler: *comparative fidelity of higher taxa in benthic marine assemblages of coastal North Carolina, USA: implications for conservation paleobiology and paleoecology*

10:15 - 10: 45

Coffee break

Chair: Martin Zuschin

10:45 - 11:00

Ashley Dineen, Peter Roopnarine & Carrie Tyler: *Complexity and stability of marine paleocommunities during escalation and restructuring*

11:00 - 11:15

Erin Dillon, Darcy Bradley, Jennifer Caselle, Kevin Lafferty, Douglas McCauley, Richard Norris & Aaron O'Dea: *Exploring the utility of dermal denticle assemblages to reconstruct shark communities on coral reefs*

11:15 - 11:30

Blanca Figuerola, Noelle Lucey & Aaron O'Dea: *Microgastropods as potential proxies for past hypoxic events*

11:30 - 11:45

Aaron O'Dea, Mauro Lepore, Andrew Altieri & Erin Dillon: *Fossil assemblages help define historic variation in Caribbean coral reefs, revealing a possible modern bright spot*

11:45 - 12:00

Paolo G. Albano, Anna Hinterplattner, Danae Thivaoui, Kristina Weber, Jan-Filip Päßler, Jan Steger, Bella Galil & Martin Zuschin: *The historical ecology of the Lessepsian invasion: perspectives from sediment cores*

12:00 - 12:15

Konstantina Agiadi, Jonathan Belmaker & Paolo Albano: *Lessepsian fish invaders caused major assemblage shift on the Israeli shelf: evidence from a live-dead agreement study*

12:15 - 12:30

Danae Thivaoui, Jan Steger, Bella Galil, Martin Zuschin & Paolo G. Albano: *The temporal dynamics of the Lessepsian invasion in the SE Mediterranean Sea reconstructed from sediment cores in a coralligenous substrate*

12:30 - 14:00

Lunch break

Session S13: Evolution of Indo-Pakistan biotas from the break-up of Gondwanaland (Late Jurassic) to the initiation of the collision with Eurasia (Eocene): between endemism and dispersals- G. Métais, D. De Franceschi, G.V.R. Prasad

Room 109 – 1st floor – Towers 44-45

Chair: Guntapalli V.R. Prasad & Grégoire Métais

09:30 - 09:45

Harsha Dhiman, Guntapalli V.R. Prasad & Vishal Verma: *Dinosaur nesting sites of the Upper Cretaceous Lameta Formation of Lower Narmada Valley, India: an insight into dinosaur palaeobiology, nesting behavior and taphonomy? A preliminary report*

09:45 - 10:00

Ranjit Lourembam: *Charophyte gyrogonites from the Deccan intertrappean beds of India: palaeobiogeographic implications*

10:00 - 10:15

Thierry Smith, Floréal Solé, Rajendra Rana, Kishor Kumar, Annelise Folie & Kenneth D. Rose: *New data on the early Eocene vertebrate assemblage from Tadkeshwar Lignite Mine, Western India*

10:15 - 10:45

Coffee break

Chair: Dario De Franceschi & Grégoire Métais

10:45 - 11:00

Muhammad A. Khan, Muhammad A. Babar, Muhammad Akhtar, Fatima Dar & Syed Abbas: *The large mammalian fauna from the new vertebrate site of Pabbi Hills (Pleistocene), Pakistan*

11:00 - 11:15

Guntapalli V.R. Prasad: *Isolation of the Indian subcontinent during its northward drift phase - Consequences for the evolution of life and biotic interchanges*

11:15 - 11:30

Matt Friedman, Philip Gingerich & Alessio Capobianco: *New marine fish faunas from the middle Eocene (Lutetian) of Pakistan: implications for the origin of the Indo-Pacific fauna*

11:30 - 11:45

Vandana Prasad, **Guntapalli V.R. Prasad**, Deepak Kshetrimayum: *Late Cretaceous origin of Grasses supports evolution of hypsodonty in Gondwanatheria Mammals: A case study from the Deccan Intertrappean Beds of Naskal and Kisalpuri, peninsular India*

11:45 - 12:00

Thierry Adatte, Hassan Khozyem, Gerta Keller, Jorge Spangenberg & Bandana Samant: *Organic carbon isotope records of the Paleocene Eocene Thermal Maximum (PETM) event in India provide new insights into mammal origination and migration*

12:00 - 12:15

Vivesh Kapur & Sunil Bajpai: *Size variation amongst non-volant mammals from the early Cambay Shale deposits of Western India: implications for palaeobiogeography and palaeohabitat*

12:30 - 14:00

Lunch break

Session S15: Experimental approaches in palaeontology: new data from old fossils - G. Merceron, T. Tütken, G. Bérillon

Amphitheatre 55B

Chair: Vincent Lazzari & Alistair Evans

08:30 - 09:00

Mark Purnell, Sarah Gabbott, Robert Sansom & Duncan Murdock: *Keynote: Experimental analysis of how character loss biases interpretations of exceptionally preserved, soft bodied organisms*

09:00 - 09:15

Katherine Williams, Neil Gostling, Gareth Dyke, Richard Oreffo & Philipp Schneider: *Developing a systematic approach to virtual three-dimensional avian bone histology*

09:15 - 09:30

Matteo Fabbri, Joao Botelho, Daniel Smith-Paredes, Nicolas Mongiardino-Koch, Michael Hanson, Adam Pritchard, Miccaela Vergara-Cereghino, Macarena Faunes Carvallo & Bhart-Anjan Bhullar: *Cracking the link between brain and skull in Archosauria: evolutionary and developmental perspectives*

09:30 - 09:45

François Druelle, Mélanie Berthet, Benoit Quintard, Jesse Young, Peter Aerts & Gilles Berillon: *The positional repertoires of hominins: New insights from extant primates*

09:45 - 10:00

Jamie Maclaren & Sandra Nauwelaerts: *Functional locomotor morphology of Lophiodontidae (Perissodactyla: Tapiromorpha) with comparisons to potential modern analogues*

10:00 - 10:15

Anne-Claire Fabre, Maitena Dumont, Anthony Herrel & Christine Wall: *Can studies on the interplay between the musculo-skeletal system and performance shed light on the paleoecology of extinct species?*

10:15 - 10:45

Coffee break

Chair: Larisa DeSantis & Thomas Tütken

10:45 - 11:00

Olga Otero, Elodie Réveillac, Alexandra Lafitte, Xavier Valentin, Florian Lapalus, Didier Bouchon & Géraldine Garcia: *Can seasonal climatic contrast in ancient tropical contexts be estimated from growth of tropical ectotherm vertebrates as controlled by environmental drivers? An experimental study*

11:00 - 11:15

Guillem Orlandi-Oliveras, Carmen Nacarino-Meneses & Meike Köhler: *Dental growth and development in Turolian hipparionine species: comparison with extant Equus and life history inferences*

11:15 - 11:30

Alistair Evans, Mark Nikolic, Melanie Hopkins, E. Susanne Daly, Kierstin Catlett & Jukka Jernvall: *Inhibitory cascade and serial segmentation in teeth, limbs and body segments: from trilobites to hominins*

11:30 - 11:45

Frederick Foster & Paul Constantino: *Macrowear and tooth enamel mechanical properties*

11:45 - 12:00

Ghislain Thiery & Peng Zhang: *Low prevalence of molar crushing behavior in tufted capuchin monkeys, and its consequences for the investigation of seed predation in extinct mammals*

12:00 - 12:15

Vincent Lazzari, Ghislain Thiery & Franck Guy: *Wrinkling of the occlusal enamel surface in Anthropoidea: insights from virtual modelling and dental topographical analysis*

12:15 - 12:30

Judith Nagel-Myers, Ioannis Mastorakos, Philip Yuya & Grant Reeder: *Finite element analysis of durophagous crab predation*

12:30 - 14: 00

Lunch break

Session S16: 3D imaging of fossils: novel approaches, advances and data management - P. Gueriau, M. Orliac, I. Rahman I. Rouget, R. Lebrun

Amphitheatre 34A

Chair: Isabelle Rouget & Loïc Bertrand

08:30 - 09:00

Sam M. Webb, Nicholas Edwards, Serge Cohen & Loïc Bertrand: *Invited speaker: The extra dimension of energy – strategies for the collection and analysis of complex synchrotron data sets*

09:00 - 09:15

Auréliane Gailliègue, Anick Abourachid, Lionel Reveret, Pierre-Yves Gagnier, Pascal Frey & Frédéric Hecht: *Automatic 3D reconstruction of polygon triangulation for mounted skeleton point cloud*

09:15 - 09:30

Roy Wogelius, Phillip Manning, Victoria Egerton, Nicholas Edwards, Sam Webb, Jennifer Anne & Uwe Bergmann: *XRF Imaging and spectroscopy applied to ancient life at SSRL*

09:30 - 09:45

Alysson Mazoni, Carolina Zabini & Jorge Stolf: *Two DIY methods for obtaining 3D images and measures of small-sized fossils*

09:45 - 10:00

Imran Rahman, Alan Spencer, Russell Garwood & Genoveva Burca: *Using neutron tomography to study fossils with poor X-ray attenuation contrast*

10:00 - 10:15

Renaud Lebrun: *MorphoDig, an open-source 3D freeware dedicated to biology*

10:15 - 10: 45

Coffee break

Chair: Renaud Lebrun & Roy Wogelius

10:45 - 11:00

Pierre Gueriau, Rafaella Georgiou, Christoph Sahle, Romain Garrouste, André Nel, Jean-Pascal Rueff, Roy Wogelius, Uwe Bergmann & Loïc Bertrand: *The chemical preservation of insects in resins revisited: insight from 3D X-ray Raman scattering*

11:00 - 11:15

Dominique Rissolo, Vid Petrovic, Alberto Nava Blank, James Chatters, Blaine Schubert, Chris Widga, Keila Bredehoeft, Joaquin Arroyo-Cabral, Pilar Luna-Erreguerena & Falko Kuester: *Development of a 3D point-based visual analytics methodology to enable virtual access and taphonomic analyses of submerged Late Pleistocene and Early Holocene cave deposits of the Yucatan, Mexico*

11:15 - 11:30

Lara Maldanis, Pierre Guériaux & Douglas Galante: *Assessing new biogenicity criteria of microfossils with high-resolution imaging techniques*

11:30 - 12:00

Agnès Robin: *Talk*

12:00 - 12:30

Discussion: Challenges in imaging and data processing techniques; requirement for good practices in data management

12:30 - 14:00

Lunch break

Session S21: Konservat-Lagerstätten, Palaeozoic Lagerstätten - S.

Charbonnier, J.T. Haug

Great Amphitheatre of Muséum (GAM) in Jardin des Plantes

Chair: Joachim T. Haug

08:30 - 08:45

Allison Daley, Jonathan Antcliffe, Harriet Drage & Stephen Pates: *The exceptionally preserved early fossil record of Euarthropoda and the Cambrian Explosion*

08:45 - 09:00

Yang Zhao, Peiyun Cong, Yujing Li, Fan Wei & Xianguang Hou: *Enigmatic mackenziids from the Early Cambrian Chengjiang Biota, China*

09:00 - 09:15

Ross Anderson, Nicholas Tosca, Stuart Kearns & Derek Briggs: *Taphonomic significance of the mineralogy of Burgess Shale fossils*

09:15 - 09:30

Jonathan Antcliffe & Anthony Hancy: *Anoxia can increase the rate of decay for cnidarian tissue: Using *Actinia equina* to understand the early fossil record*

09:30 - 09:45

Julien Kimmig, Luke Strotz, Sara Kimmig, Sven Egenhoff & Bruce Lieberman: *The middle Cambrian Spence Shale (Series 3: Stage 5) Lagerstätte: a key Cambrian ecosystem*

09:45 - 10:00

Peng Shanchi: *New oryctocephalid taxa from the Cambrian Balang Biota in NW Hunan with a review on the classification of oryctocephlids*

10:00 - 10:15

Javier Ortega-Hernandez, Jie Yang, David Legg, Lian Tan, Jin-bo Hou & Xi-guang Zhang: *Early Cambrian fuxianhuiids from China reveal origin of the gnathobasic protopodite in euarthropods*

10:15 - 10:45

Coffee break

Chair: Joachim T. Haug

10:45 - 11:00

Petr Budil, Oldřich Fatka, Lukáš Laibl, Martina Nohejlová & Marika Polechová: *Libeň and Letná formations Lagerstätten (Sandbian, Prague Basin, Barrandian area): state of art and perspectives*

11:00 - 11:15

Derek Briggs, Huaibao P. Liu, Robert M. McKay & Brian J. Witzke: *The Winneshiek biota, a Konservat-Lagerstätte in an Ordovician impact crater*

11:15 - 11:30

Carolin Haug: *The diversity of feeding apparatuses of arthropods in the Rhynie Chert*

11:30 - 11:45

Derek Briggs, Derek J. Siveter, David J. Siveter, Imran A. Rahman & Mark D. Sutton: *The Herefordshire Konservat-Lagerstätte, singular Silurian evidence for the history of invertebrate clades*

11:45 - 12:00

Sydney Moyo: *Preliminary report on the first mid-Permian ecosystem from South Africa, as revealed by a new Lagerstätte near Sutherland, Northern Cape*

12:00 - 12:30

Robert Sansom, Mark Purnell & Sarah Gabbott: *Correlated patterns of anatomical decay and fossil preservation allow systematic analysis of exceptional preservation*

12:15 - 12:30

Questions and final discussion

12:30 - 14:00

Lunch break

Session S36: The Devonian: life, environments and time - J. Marshall, L. Slavik, C. Brett (continuing)

Room 107 – 1st floor – Towers 44-45

Chair: Eberhard Schindler

08:30 - 08:45

John E. Marshall, Carlton E. Brett & Ladislav Slavík: *Introduction and welcome*

08:45 - 09:00

Anne-Christine da Silva, David De Vleeschouwer, Lawrence Percival, Matthias Sinnesael, Niels De Winter & Philippe Claeys: *Astrochronology and chemostratigraphy for the Frasnian-Famennian boundary section (Late Devonian) at Steinbruch Schmidt*

09:00 - 09:15

John E. Marshall, Emma Reeves, Carys Bennett, Sarah Davies, Tim Kearsey, Dave Millward, Tim Smithson, Mike Browne & Jenny Clack: *The first palynological assemblage from the Famennian of Scotland and its significance for understanding early tetrapod age relationships*

09:15 - 09:30

Wenkun Qie: *Conodont succession of the regional Yangshuo Stage (Late Famennian, Devonian) and possible annulata and Dashberg events at the Tieshan section in Guilin, South China*

09:30 - 09:45

Julien Denayer, Bernard Mottequin, Cyrille Pretianni & Edouard Poty: *Event stratigraphy across the Devonian-Carboniferous? New views from the shelf*

09:45 - 10:00

Carlo Corradini & Claudia Spalletta: *Continuity of fossil record and biozonation schemes: an example across the Devonian/Carboniferous boundary*

10:15 - 10:45

Coffee break

10:45 - 12:30

John E. Marshall, Carlton E. Brett & Ladislav Slavík: *SDS Business Meeting*

12:30 - 14:00

Lunch break

Session S37: The onset of the Great Ordovician Biodiversification (GOBE): fossils, radiations and Lagerstätten - IGCP 653 session - T. Servais, D. Harper, B. Lefebvre, A. Hunter

Amphitheatre 55A

Chair: Thomas Servais

08:30 - 08:45

David Harper, Thomas Servais, Borja Cascales-Miñana, Timothy P. Topper & Per Ahlberg: *The late Cambrian (Furongian) gap: real or apparent*

08:45 - 09:00

Bertrand Lefebvre, Bernard Pittet, Farid Saleh Pierre Sansjofre, Muriel Vidal & Khadija El Hariri: *New occurrences of the Early Ordovician Fezouata Biota (Morocco): predicted and found*

09:00 - 09:15

Martina Nohejlová, Elise Nardin, Bertrand Lefebvre & Farid Saleh: *Exceptionally preserved soft parts in eocrinoid echinoderms from the Fezouata Shale (Lower Ordovician, Morocco)*

09:15 - 09:30

Aaron Hunter & Javier Ortega-Hernández: *A primitive starfish ancestor from Morocco reveals the origin of crown group Echinodermata*

09:30 - 09:45

Juan Carlos Gutiérrez-Marco, Sofia Pereira, Jorge Colmenar, Samuel Zamora & Isabel Rábano: *Middle Berounian (ca. Sandbian 2-Katian 1) trilobite, brachiopod and echinoderm assemblages from the southern Central Iberian Zone, Spain*

09:45 - 10:00

Farid Saleh, Bertrand Lefebvre, Bernard Pittet & Martina Nohejlová: *How does the skeleton influence soft tissues preservation? A case study from the Early Ordovician Fezouata Lagerstätte*

10:00 - 10:15

Alexandre Pohl, David Harper, Yannick Donnadieu, Guillaume Le Hir, Elise Nardin & Thijs Vandenbroucke, Thomas Servais: *Using climate modelling to reconstruct possible patterns of primary productivity and ocean circulation during the GOBE*

10:15 - 10:45

Coffee break

Chair: David A.T. Harper

10:45 - 11:15

Alycia Stigall & Cole Edwards: *Keynote: Coordinated biotic and geochemical change during the Great Ordovician Biodiversification Event: the view from Laurentia*

11:15 - 11:30

Taniel Danelian & Claude Monnet: *The pattern of changes in Ordovician radiolarian diversity in the context of the clade's Early Paleozoic diversification*

11:30 - 11:45

Aaron Hunter: *Exceptionally preserved Late Ordovician 'starfish beds' from the Tafilalt area, Morocco: Implications for the Great Ordovician Biodiversification Event*

11:45 - 12:00

James Sprinkle & Thomas E. Guensburg: *Evidence for homoplasy in hybocrinid crinoid and blastozoan oral regions and its phylogenetic implications*

12:00 - 12:15

Bertrand Lefebvre, Juan Carlos Gutiérrez-Marco, Aaron Hunter, Martina Nohejlova, Elise Nardin Colin Sumrall & Samuel Zamora: *Palaeobiogeographic implications of exceptionally preserved Late Ordovician echinoderm assemblages from the Tafilalt area, Morocco*

12:15 - 12:30

Yiyang Deng, Junxuan Fan & Zhongyang Chen: *Evolution of Ordovician Marine Biodiversity Based on Data from South China and the CONOP Technique*

12:30 - 14:00

Lunch break

Session S39: Timetrees - M. Laurin, G. Didier, R. Warnock

Amphitheatre 34B

Chair: Michel Laurin

08:30 - 08:45

Graeme Lloyd: *Using time to account for incompleteness when assessing rates of discrete character evolution*

08:45 - 09:00

Allison Hsiang & Fredrik Ronquist: *Probabilistic models of correlated morphological character evolution for phylogenetic inference and divergence time estimation*

09:00 - 09:15

Gilles Didier & Michel Laurin: *Exact distribution of divergence times from fossil ages and diversification rates*

09:15 - 09:30

Amaury Lambert, Odile Maliet & Fanny Gascuel: *Ranked tree shapes, non-random extinctions and the loss of phylogenetic diversity*

09:30 - 09:45

Michael Matschiner: *Current issues in divergence-time estimation with genomes and fossils*

09:45 - 10:00

Ofir Katz: *The fossil and molecular records tell different stories of phylogeny and evolutionary history*

10:00 - 10:15

Matthew Phillips & Mélina Celik: *Resolving phylogenetic and temporal conflict among anatomical regions reveals an end-Triassic origin of mammals*

10:15 - 10:45

Coffee break

Chair: Rachel Warnock

10:45 - 11:00

Chi Zhang & Tanja Stadler: *Inferring net diversification and fossil discovery rates change over time integrating morphological and sequence data*

11:00 - 11:15

Joseph O'Reilly & Phil Donoghue: *The effect of sub-sampling fossil occurrence data on the accuracy of age estimates obtained from the Fossilised Birth-Death process (FBD)*

11:15 - 11:30

Joanna Wolfe: *The importance of fossils in dating the Tree of Life: From the arthropod radiation to gut bacteria*

11:30 - 11:45

Jesus Lozano-Fernandez, Alastair R. Tanner, Gonzalo Giribet, Jakob Vinther, Gregory R. Edgecombe & Davide Pisani: *A molecular palaeobiological approach to understand velvet worm terrestrialization*

11:45 - 12:00

Qun Yang, Xiaoyan Sun, Junye Ma, Yonghua Gai, Chunxiang Li, Jiasheng Hao & Peiyun Cong: *Divergences of early terrestrial arthropods based on combined fossil and molecular data*

12:00 - 12:15

Olivier Béthoux, Cyrille d'Haese, Michel Laurin & Yingying Cui: *The age and ancient biogeography of stoneflies (Insecta: Plecoptera)*

12:15 - 12:30

Dominic Evangelista: *The evolution of cockroaches and termites through fossils and phylogeny*

12:30 - 14: 00

Lunch break

Thursday July 12th, p.m.

Sessions: S02, S03, S05, S09, S10, S15, S16, S21, S37, S39, S42, S43

Session S02: Angiosperms, from the beginning to their diversification - A. Boura, D. De Franceschi, J.B. Diez-Ferrer

Room 109 – 1st floor – Towers 44-45

Chair: Dario De Franceschi

14:00 - 14:15

Paul Strother: *The evolution of sporophyte development during the early Paleozoic*

14:15 - 14:30

Rose Prevec & Aviwe Matiwane: *A missing link in Glossopteris evolution: new species of Lidgettonia from a middle Permian Lagerstätte in South Africa*

14:30 - 14:45

Nishida Harufumi, Kathleen Pigg & Melanie De Vore: *Homologous or analogous? Morphological interpretations of permineralized glossopterid reproductive organs from Queensland, Australia, in comparison to angiosperm carpel and stamen*

14:45 - 15:00

Xin Wang: *Early Jurassic Nanjinganthus and its Implications on angiosperm Evolution*

15:00 - 15:15

James Doyle & Peter Endress: *Implications of phylogenetic analyses for the Cretaceous radiation of Magnoliidae*

15:15 - 15:30

Jose B. Diez, Luis Miguel Sender, James Doyle, Uxue Villanueva-Amadoz, Denise Pons & Javier Ferrer: *A global overview of Early Cretaceous angiosperm records from Teruel province (Spain)*

15:30 - 15:45

Anaïs Boura, Gwenaëlle Saulnier, Bernard Gomez, Véronique Daviero-Gomez, Dario De Franceschi, Denise Pons, Ninon Robin, Géraldine Garcia, Jean-Marie Boiteau & Xavier Valentin: *On some angiosperm stem diversity from the Cenomanian of Envigne valley (Vienne, western France)*

15:45 - 16:15

Coffee break

Chair: Anaïs Boura

16:15 - 16:30

Cédric Del Rio & Dario De Franceschi: *The Icacinaceae from the Palaeogene of the Paris Basin: diversity, affinities and changes through the PETM*

16:30 - 16:45

Alice Novello, Caroline Stromberg, Ellen Currano, Aaron Pan, Neil Tabor & Bonnie Jacobs: *The role of grasses in the East African vegetation across the Oligocene-Miocene boundary: new results and perspectives from plant silica (phytolith) analyses at Chilga and Mush Valley (Ethiopia)*

Session S03: Back to the sea: from Late Palaeozoic to Cenozoic, the Tetrapod adventure - N. Bardet, V. Fischer, A. Houssaye, S. Jouve, O. Lambert, P. Vincent (continuing)

Amphitheatre 45B

Chair: Peggy Vincent & Alexandra Houssaye

14:00 - 14:15

Marta S. Fernández, Lisandro Campos, Erin E. Maxwell & Yanina Herrera: *Late Jurassic ichthyosaurs from the Neuquén Basin (Central-West Argentina): new insights into the phylogeny of the Ophthalmosauridae*

14:15 - 14:30

Nikolay Zverkov & Vamidimir Efimov: *Reassessment of Undorosaurus Efimov, 1999, a mysterious Late Jurassic ichthyosaur of the Boreal Realm*

14:30 - 14:45

Michael Caldwell: *The fossil record of marine adapted snake lizards: origins, convergence, and phylogeny*

14:45 - 15:00

Michela Johnson, Mark T. Young & Stephen L. Brusatte: *The diversity and radiation of Machimosaurini (Crocodylomorpha, Thalattosuchia, Teleosauroidae) during the Middle Jurassic, and discussion on their morphofunctional adaptations*

15:00 - 15:15

Leonard Dewaele, Olivier Lambert & Stephen Louwye: *New insights in the evolution of true seals (Carnivora, Pinnipedia, Phocidae): diversity and paleobiogeography*

15:15 - 15:30

Felix G. Marx, Erich M. G. Fitzgerald & R. Ewan Fordyce: *Clinging to the shore: Oligocene whales of Australasia offer a rare insight into cetacean palaeobiogeography*

15:30 - 15:45

Olivier Lambert, Camille Auclair, Cirilo Cauxeiro, Michel Lopez & Sylvain Adnet: *A close relative of the Amazon river dolphin in marine deposits: a new Iniidae from the late Miocene of Angola*

15:45 - 16:15

Coffee break

Chair: Olivier Lambert & Stéphane Jouve

16:15 - 16:30

Susana Gutarra Diaz, Benjamin C. Moon, Imran Rahman, Colin Palmer, Stephan Lautenschlager, Alison Brimacombe & Michael J. Benton: *Evolution of body plan and the hydrodynamic properties of ichthyosaurs*

16:30 - 16:45

Valentin Fischer, Roger B.J. Benson, Patrick S. Druckenmiller, Laura C. Soul, Hilary F. Ketchum & Nathalie Bardet: *Towards an adaptive landscape for short-necked plesiosaurs*

16:45 - 17:00

David Hocking, Felix G. Marx, Alistair Evans & Erich M.G. Fitzgerald: *The origins of forelimb-propelled swimming in pinnipeds*

17:00 - 17:15

Florian Martin, Fabrice Lihoreau, Stéphane Ducrocq & Jean-Renaud Boisserie: *The appendicular skeleton and the phylogenetic relationships among a cetancodont lineage, the Hippopotamoidea*

Session S05: Biodiversity changes through times: crisis and radiations - S. Crasquin, T. Adatte (continuing)

Amphitheatre 44

Chair: Yukio Isozaki

14:00 – 14:15:

Richard Kelly, Michael Benton & Andrew Ross: *Impact of the end Triassic mass extinction on insect diversity and ecology*

14:30 - 14:45

Marie-Béatrice Forel, Oana-Gabriela Sebe-Radoi, Sylvie Crasquin & Eugen Gradinaru: *Middle Triassic ostracods from the North Dobrogean Orogen (Romania): between long-term survival and emergence of Triassic taxa*

14:15 - 14:30

Suresh Singh, Armin Elsler, Tom Stubbs, Emily Rayfield & Michael Benton: *Turning over a new leaf: the trophic evolution of herbivorous archosauromorphs through the Late Triassic and Early Jurassic*

14:45 - 15:00

Lydia Tackett & Annaka Clement: *Late Triassic predator-prey escalatory dynamics in the marine realm: macrofossil, microfossil, sedimentological, and ichnological evidence*

15:00 - 15:15

Sebastian Stumpf & Jürgen Kriwet: *Fine-scale diversity analysis of Jurassic Chondrichthyes disproves competition between Jurassic elasmobranch and hybodontiform fishes*

15:15 - 15:30

Takao Ubukata: *Assessment of morphological richness in morphospace: a case study for analysis of disparity in ammonoids*

15:30 - 15:45

Thierry Adatte, Gerta Keller, Eric Font, André Mbabi Bitchong Mbabi Bitchong, Paula Mateo, Janhavi Puneekar, Blair Schoene & Michael P. Eddy: *Near coincidence of maximum Deccan volcanism with the Cretaceous-Paleogene boundary: evidences from U-Pb geochronology and mercury chemostratigraphy*

15:45 - 16:15

Coffee break

Chair: Sylvie Crasquin

16:15 - 16:30

Catherine Klein, Davide Pisani, Daniel Field, Rebecca Lakin, Matthew Wills & Nicholas Longrich: *Molecular and morphological evidence for a rapid recovery of crown snakes after the Cretaceous-Palaeogene mass extinction*

16:30 - 16:45

Amel M'Hamdi, Ilef belhajtaher, Slimani Hamid, Najeh Benchaabane, Koree Guedee Elysee & Soussi Mohamed: *Dinoflagellates cyst from K/Pg boundary at Oued Malah section, northern Tunisia*

16:45 - 17:00

Anna Weiss & Rowan Martindale: *Extinction selectivity of sorals during the Paleocene-Eocene Thermal Maximum*

17:00 - 17:15

Jérémy Tissier & Damien Becker: *Impact of the Grande Coupure event (Eocene-Oligocene transition) on European rhinocerotoids: rates of speciation and extinction as an explanation of diversification patterns?*

17:15 - 17:30

Giovanna Cidade & Annie Hsiou: *The evolutionary, biogeographical and ecological history of Cenozoic Crocodylomorphs: an updated review with new perspectives*

17:30 - 17:45

Felisa Smith, Rosemary Elliott Smith, Kathleen Lyons & Jonathan Payne: *Body size downgrading across the late Quaternary*

17:45 - 18:00

Alycia Stigall, Adriane Lam, David Wright & Jennifer Bauer: *How is biodiversity produced? Biotic immigration events, speciation, and the accumulation of biodiversity in the fossil record*

Session S09: Coevolution of life and environments: integrating the palaeoecological, sedimentological and geochemical Records- L. Tackett, L. Tarhan (continuing)

Amphitheatre 45A

Chair: Lidya Tarhan & Lydia Tackett

14:00 - 14:15

Yana Shurupova & Ekaterina Tesakova: *The use of ostracods in palaeoecological reconstructions on the example of the Callovian and lower Oxfordian of the Mikhailovcement (Ryazan Region, Russia)*

14:15 - 14:30

Roger Summons, Jorsua Herrera, Ainara Sistiaga, Caleb Brown, Donald Henderson & Jakob Vinther: *Molecular characterization of preserved tissues in a Cretaceous ankylosaur*

14:30 - 14:45

Rongyu Li: *Biotic interactions and food chain/web reconstruction of a community from Cretaceous Interior Seaway (CIS), Manitoba, Canada: local and beyond*

14:45 - 15:00

Fabienne Giraud, Claude Colombié, Stéphane Reboulet, Jean-François Deconinck & Jorge Spangenberg: *Disappearance of orbitolinids in upper Cretaceous shallow marine successions of southeast France: relationships with the Mid Cenomanian Event 1?*

15:00 - 15:15

Camille Dwyer, Corinne Myers & Viorel Atudorei: $\delta^{18}O$ values of Late Cretaceous Western Interior seaway deep water marine bivalves

15:15 - 15:30

Kilian Eichenseer, Uwe Balthasar, Christopher Smart, Julian Stander & Wolfgang Kiessling: *Decreasing environmental influence on the Phanerozoic success of marine calcifiers*

15:45 - 16:15

Coffee break

Chair: Lidya Tarhan & Lydia Tackett

16:15 - 16:30

Martin Ronald: *Co-evolution of marine and terrestrial biodiversification: links to producer stoichiometry and the leaf economics spectrum*

16:30 - 16:45

Alice Giannetti, Hugo Corbi, Santiago Falces-Delgado & Jose Baeza-Carratalá: *Integrated paleontological analysis aimed to the characterization of a shallow-water platform system (Alicante province, Southern Spain)*

16:45 - 17:00

Nuria Lahuerta, Colin Murray-Wallace & Adriana Garcia: *Late Quaternary relative sea-level changes and evolution of the Lacepede Shelf, southern Australia*

17:00 - 17:15

Hugo Corbi, Irene Peñalver-Clavel & Paul Blanchon: *Integrating microfacies and sedimentology in a modern Caribbean fringing reef (Puerto Morelos, Mexico)*

17:15 - 17:30

Pokorny Richard & Lukáš Krmíček: *The ichnological record in Iceland – unusual finds in unexpected landscape*

Session S10: Conservation palaeobiology and historical ecology of marine ecosystems - P.G. Albano, A. O'Dea, M. Zuschin (continuing)

Room 105 – 1st floor – Towers 44-45

Chair: Paolo G. Albano

14:00 - 14:15

Martinelli Julieta, Sandra Gordillo, Carla de Aranzamendi & Marcelo Rivadeneira: *Historical voyages, tourist souvenirs and the fate of the endemic mollusc fauna of Rapa Nui*

14:15 - 14:30

Kristopher Kusnerik, Guy Means, Roger Portell & Michal Kowalewski: *tracking trends in the historical ecology of Florida's freshwater springs and rivers using fossil and recent mollusks*

14:30 - 14:45

Shamindri Tennakoon, William Lindberg & Michal Kowalewski: *Live-dead fidelity of mollusk assemblages in the Suwannee Regional Reef System, an artificial reef in Florida, USA*

14:45 - 15:00

Daniele Scarponi, Michele Azzarone, Claudio Pellegrini, Rafał Nawrot, Kristopher Kusnerik, Troy Dexter, Jackalyn Wittmer, Fabiano Gamberi, Fabio Trincardi & Michał Kowalewski: *Documenting climate mediated changes in the Po river deltaic macrobenthic systems through latest Quaternary glacial-interglacial cycles*

15:00 - 15:15

Michele Azzarone, Daniele Scarponi, John Huntley, Rafał Nawrot, Alessandro Amorosi, Monica Caffara, Andrea Gustinelli & Michal Kowalewski: *Trematode dynamics through time and space in Holocene sedimentary successions of Po Basin, Italy*

15:15 - 15:30

Adam Tomasovych, Paolo Albano, Tomáš Fuksi, Ivo Gallmetzer, Alex Haselmair, Michal Kowalewski, Rafał Nawrot, Vedrana Nerlovic, Daniele Scarponi & Martin Zuschin: *Unprecedented increase in size of the bivalve *Corbula gibba* driven by the 20th century anthropogenic impacts in the northern Adriatic Sea*

15:30 - 15:45

Martin Zuschin, Ivo Gallmetzer, Alexandra Haselmair & Adam Tomasovych: *Spatial and temporal ecological heterogeneity and anthropogenic impact in the northern Adriatic Sea during the Holocene transgression*

15:45 - 16:15

Coffee break

Chair: Paolo G. Albano

16:15 - 16:30

Jere Lipps & Bruce Hayward: *Fossil Foraminifera in Conservation Paleobiology*

16:30 - 16:45

Malcolm Hart: *Foraminifera in the estuaries of South-West England: maerl, sea grass and conservation*

16:45 - 17:00

Briony Mamo, Moriaki Yasuhara, Jonathan Cybulski & David Baker: *Murky waters in benthic quarters? The dynamic distribution of Hong Kong foraminifera, a reflection of coastal ecosystems in Anthropocene Asia*

17:00 - 17:15

Débora Diniz, Valério Machado-Junior & Nicolai Mirlean: *Superficial deposition of palynomorphs in continental shelf as the evidence on continent and ocean communication (southernmost Brazil)*

Session S15: Experimental approaches in palaeontology: new data from old fossils - G. Merceron, T. Tütken, G. Bérillon (continuing)

Amphitheatre 55B

Chair: Ghislain Thiery & Anne-Claire Fabre

14:00 - 14:15

Nicole Ackermans, Marcus Clauss, Ellen Schulz-Kornas, Thomas Kaiser, Daniela Winkler, Dennis Mueller, Patrick Kircher, Juergen Hummel & Jean-Michel Hatt: *Absolute and meso-wear in goats fed diets of different abrasiveness for half a year*

14:15 - 14:30

Gildas Merceron, Jean-Renaud Boisserie, Denis Gautier, Anusha Ramdarshan & Cécile Blondel: *Tooth wear, diet and ecology: From French country-side sheep to extinct antelopes from the Omo valley, Ethiopia*

14:30 - 14:45

Ellen Schulz-Kornas, Daniela Winkler, **Marcus Clauss,** Jessica Carlsson, Juergen Hummel, Dennis Mueller, Jean-Michel Hatt & Thomas Kaiser: *Everything matters: molar surface texture in goats fed diets of different abrasiveness*

14:45 - 15:00

Louise Martin, Lisa Krause, Arlett Ulbricht, Daniela Winkler, Thomas Kaiser, Jacqueline Mueller, Juergen Hummel, Marcus Clauss, Jean-Michel Hatt & Ellen Schulz-Kornas: *Wear at different levels of resolution in rabbits fed diets of different abrasiveness*

15:00 - 15:15

Marcus Clauss, Dennis Mueller, Nicole Ackermans, Louise Martin, Patrick Kircher, Juergen Hummel & Jean-Michel Hatt: *The ruminant sorting mechanism: an innovative digestive strategy that washes external abrasives before chewing*

15:15 - 15:30

Katrin Böhm, Daniela Winkler, Thomas Kaiser & Thomas Tütken: *Diagenetic alteration of dental surface textures by sediment transport: a tumbling experiment*

15:30 - 15:45

Mark Purnell, Christopher Nedza, Neil Adams & Leszek Rychlik: *How ecologically sensitive is texture analysis of tooth microwear? Testing hypotheses of niche partitioning in sympatric species*

15:45 - 16:15

Coffee break

Chair: Mark Purnell & Olga Otero

16:15 - 16:30

Larisa Desantis, Graeme Coulson, Eva Biedron & Carson Hedberg: *The present is the key to the past: assessing how extant marsupials track their environment to clarify mammalian responses to climate change*

16:30 - 16:45

Daniela E. Winkler, Ellen Schulz-Kornas, Thomas M. Kaiser, Annelies De Cuyper, Marcus Clauss & Thomas Tütken: *Dental 3D surface texture in guinea pigs fed fresh or dried forages reflects phytolith content and plant material properties*

16:45 - 17:00

Céline Robinet, Gildas Merceron, Bernardino Mamani Quispe, Myriam Boivin, Adriana Candela & Laurent Marivaux: *Wear your diet on your teeth: dental microwear texture analysis as a proxy for estimating the diet of extinct South American caviomorph rodents*

17:00 - 17:30

Discussion animated by Gildas Merceron, Thomas Tütken and Gilles Bérillon with the Chairman

Session S16: 3D imaging of fossils: novel approaches, advances and data management - P. Gueriau, M. Orliac, I. Rahman I. Rouget, R. Lebrun (continuing)

Amphitheatre 34A

Chair: Maeva Orliac & Sophie Sanchez

14:00 - 14:15

Alberto Boscaini, Dawid Iurino, Cástor Cartelle, André Strauss, Gerardo De Iuliis, Raffaele Sardella, German Tirao, Timothy Gaudin & François Pujos: *Digital endocranial reconstructions of the extinct scelidotherid sloths (*Xenarthra*, *Mylodontidae*): emerging patterns in folivorans' evolution*

14:15 - 14:30

Kate Andrzejewski, Michael Polcyn, Elizabeth Gomani Chindebvu, Dale Winkler & Louis Jacobos: *3D Reconstruction of the Brain Endocast and Inner Ear of *Malawisaurus dixeyi* (Sauropoda: Titanosauria)*

14:30 - 14:45

Martin Qvarnström, Per E. Ahlberg & Grzegorz Niedźwiedzki: *Tyrannosaurid-like osteophagy by a Triassic archosaur revealed through synchrotron tomography of coprolites*

14:45 - 15:00

Christophe Mallet, Raphaël Cornette, Guillaume Billet & Alexandra Houssaye: *Morphofunctional 3D analysis of long bone shape variation among rhinos*

15:00 - 15:15

Javier Dorador, Francisco J. Rodríguez-Tovar & Jürgen Titschack: *3D tomography on an Early Jurassic coral: solving a paleontological question by non-destructive investigations*

15:15 - 15:30

Judith Sclafani, Audrey Bourne, Caroline Gazze, Brooke Roselle, Max Christie, Curtis Congreve, Mark Patzkowsky: *Quantifying morphological change across a mass extinction: a test of a 3D photogrammetry method using strophomenide brachiopods*

15:30 - 15:45

James Saulsbury & Samuel Zamora: *Analysis of 3D comparative data for paleobiological inference: the circulatory system of a giant fossil crinoid as a case study*

15:45 - 16:15

Coffee break

Chair: Imran Rahman & Pierre Guerriau

16:15 - 16:30

Sandra Engels & Daniela Handl: *Virtual dissection and characterization of extant and fossil specimens with VGSTUDIO MAX*

16:30 - 16:45

Olivier Béthoux, Artémis Llamosi & Séverine Toussaint: *Fossils enlightened by Reflectance Transforming Imaging*

16:45 - 17:00

Amane Tajika & Christian Klug: *Intraspecific variation in cephalopods conchs changes during ontogeny: new data from 3D morphometry of Nautilus pompilius*

17:00 - 17:15

Raphaël Vasseur, Simon Boivin, Bernard Lathuilière, Luliana Lazar, Christophe Durlet, Rowan Martindale, Stéphane Bodin, Khalid El Hmidi, Jérôme Sterpenich & Christophe Morlot: *Computed Tomography for ichnological analysis of modern marine cores: palaeoenvironment and reservoir quality applications*

17:15 - 17:30

Khaoula Kouraiss, Khadija El Hariri, Abderrazak El Albani, Abdelfattah Azizi, Arnaud Mazurier & Jean Vannier: *High-resolution X-ray computed tomography of Lower Ordovician Palaeoscolecoid worms*

17:30 - 17:45

Sarah Jacquet, Glenn Brock, Tara Selly & James Schiffbauer: *X-ray microscopy of plate assembly in Early Devonian articulated machaeridians from Australia*

Session S21: Konservat-Lagerstätten, Jurassic-Cretaceous Lagerstätten - S. Charbonnier, J.T. Haug (continuing)

Great Amphitheatre of Muséum (GAM) in Jardin des Plantes

Chair: Sylvain Charbonnier

14:00 - 14:15

Rowan Martindale, Selva Marroquín, Theodore Them II, Benjamin Gill, Andrew Caruthers, Martin Aberhan, Erin Maxwell & Andrew Knoll: *The Ya Ha Tinda Lagerstätte: a newly documented Pliensbachian-Toarcian (Early Jurassic, ca. 183 Ma) fossil Konservat-Lagerstätte from Alberta, Canada*

14:15 - 14:30

Isabelle Kruta, Isabelle Rouget, Arnaud Brayard, Vincent Fernandez & Sylvain Charbonnier: *Inside out exceptionally preserved Jurassic cephalopods*

14:30 - 14:45

Malcolm Hart: *Arm hooks and statoliths of coleoid cephalopods from Jurassic Lagerstätten in the Wessex Basin, Southern England*

14:45 - 15:00

Denis Audo, Romain Sabroux, Sylvain Charbonnier, Laure Corbari & Alexandre Hassanin: *The sea spiders from Solnhofen (Arthropoda: Pycnogonida)*

15:00 - 15:15

Patrick Chellouche, Franz Fürsich & Matthias Mäuser: *Palaeoenvironmental constraints of Lithographic Limestones: Insights from the Upper Jurassic Wattendorf Plattenkalk Lagerstätte (Middle Kimmeridgian, Southern Germany)*

15:15 - 15:30

Julien Devillez & Sylvain Charbonnier: *Phylogenetic affinities of erymid lobsters (Crustacea, Decapoda) using morphological characters and systematic implications*

15:30 - 15:45

Didier Merle & Steffen Kiel: *Toward a documentation of the residual shell colour patterns for the Mesozoic times*

15:45 - 16:15

Coffee break

16:15 - 16:30

James Jepson, Maria McNamara, Chungkun Shih, Dong Ren & Norman MacLeod: *Geometric morphometrics and the evolution of wing colour patterns in fossil insects*

16:30 - 16:45

Clément Jauvion, Sylvain Bernard, Pierre Gueriau & Sylvain Charbonnier: *A mineralogist's point of view on exceptional preservation: the case study of the La Voulte-sur-Rhône crustacean fossils*

16:45 - 17:00

Christopher Rogers, Timothy Astrop, Maria McNamara & Sam Webb: *Geometry and chemistry of eye melanosomes in cephalopods and vertebrates: implications for fossil identification*

17:00 - 17:15

Layla El Hajj, François Baudin, Raymond Geze, Lionel Cavin, Géraldine Garcia, David J. Horne, Sibelle Maksoud, Olga Otero & Dany Azar: *Dysodiles: a new Konservat-Lagerstätte from the Lower Barremian of Lebanon*

17:15 - 17:30

Lionel Cavin, Walid Ben Ali, Kamel Boukhalfa, Feixiang Wu, Mohamed Ouaja & Mohamed Soussi: *Fish assemblage from an upper Barremian Konservat Lagerstätte in the Sidi Aïch Formation of the Chotts basin (Southern Tunisia)*

17:30 - 17:45

Jesús Marugán, Thomas Martin, Romain Vullo, Hugo Martín-Abad, Zhe-Xi Luo & Angela D. Buscalioni: *The morphology of Spinolestes, an Eutriconodont mammal from Las Hoyas (Lower Cretaceous, Spain)*

Session S37: The onset of the Great Ordovician Biodiversification (GOBE): fossils, radiations and Lagerstätten - IGCP 653 session - T. Servais, D. Harper, B. Lefebvre, A. Hunter (continuing)

Amphitheatre 55A

Chair: Aaron Hunter

14:00 - 14:45

Mark Patzkowsky, Curtis Congreve & Peter Wagner: *Keynote: An application of birth-death models to phylogenies to determine the timing of the Ordovician radiation*

14:45 - 15:00

Aïcha Achab & Esther Asselin: *The Tremadocian age of the E. symmetrica Zone revealed by chitinozoans from the Lauzon N section, Québec*

15:00 - 15:15

Kui Yan & Jun Li: *A Katian microphytoplankton assemblage from Wanhe, Yongshan, east Yunnan Province, South China*

15:15 - 15:30

Ru Fan, Shenghui Deng, Yuanzheng Lu, Shibei Zhang, Xin Li & Xueying Ma: *Katian (Upper Ordovician) conodonts from the Upper Yangtze Platform, South China: Implications for understanding conodont diversifications in the Ordovician*

15:30 - 15:45

Yan Liang, Olle Hints, Xiaocong Luan, Thomas Servais, Jaak Nõlvak, Peng Tang & Rongchang Wu: *Palaeoecology of Floian and Dapingian (Ordovician) chitinozoans in South China*

15:45 - 16:15

Coffee break

Chair: Bertrand Lefebvre

16:15 - 17:00

Christian Rasmussen, Claus Nielsen, Björn Kröger, Jorge Colmenar, Morten Nielsen, Mats Eriksson, Gilles Cuny, Jan Rasmussen, Thomas Servais, Arne Nielsen & David Harper: *Keynote (3): Repartitioning Sepkoski's original dataset into life cycle modes: Testing the importance of dispersal potential as a driver for Phanerozoic marine biodiversity levels*

16:45 - 17:00

Zhihua Yang, Xiuchun Jing, Xunlian Wang, Hongrui Zhou & Hui Ren: *Late Ordovician Conodonts from the Dashetai area in Inner Mongolia, North China*

17:00 - 17:15

Renbin Zhan, Jiayu Rong, Kyi Pyar Aung & Shuzhong Shen: *Saucrorthis (Brachiopoda) fauna from the Northern Shan States of Myanmar and its significance*

17:15 - 17:30

Oive Tinn, Liisa Lang, Tiiu Märss & Kalle Kirsimäe: *A strange case of two fishes: enigmatic disappearance of bone tissue or an originally unossified osteostracan*

17:30 - 17:45

Thomas Servais & David Harper: *Is the Great Ordovician Biodiversification Event (GOBE) an event?*

17:45 - 18:00

Thomas Servais, David Harper, Olga Obut, Christian Rasmussen, Alycia Stigall & Zhang Yuandong: *IGCP 653 Business Meeting*

Session S39: Timetrees - M. Laurin, G. Didier, R. Warnock (continuing)

Amphitheatre 34B

Chair: Gilles Didier

14:00 - 14:15

Rachel Warnock, Joëlle Barido-Sottani & Melanie Hopkins: *Assessing the impact of stratigraphic age uncertainty on molecular estimates of divergence times*

14:15 - 15:00

General discussion for S39 (on all themes covered by all speakers and related topics)

15:45 - 16:15

Coffee break

Session S42: "Early" vertebrates: from fossils to genomes - A. Pradel, D. Davesne, R. Sansom

Amphitheatre 34B

Chair: Sam Gilles & Rob Sansom

16:15 - 16:30

Jing Lu, You-an Zhu, Sam Giles, Gavin Young & Min Zhu: *The rise of crown features in stem gnathostomes*

16:30 - 16:45

Jorge Mondéjar: *A new onychodontid (Osteichthyes; Sarcopterygii) from the Middle Devonian of Morocco*

16:45 - 17:00

Gavin Young & Jing Lu: *The skull of the 'acanthothoracid' placoderm Weejasperaspis gavini, from the Early Devonian (Emsian) limestones of Burrinjuck, NSW*

17:00 - 17:15

Claire Derycke, Benjamin Khatir & Jean-Marc Marion: *Acanthodian diversity in Strud (Devonian, Famennian, Belgium)*

17:15 - 17:45

Gaël Clément: *The Old Fishes and the Man*

Session S43: Open session - D. Gommery, M.B. Forel

Room 107 – 1st floor – Towers 44-45

Chair: Gaël Clément

14:00 - 14:15

Arturo Heredia, Pablo Pazos, Ignacio Díaz Martínez, Diana Fernández & Marcos Comerio: *A new narrow-gauge sauropod trackway from the Candeleros Formation (Upper Cretaceous, Patagonia, Argentina): a singular case for the Cenomanian sauropod track record*

14:15 - 14:30

Giuseppe Marramà, Ortwin Schultz & Jürgen Kriwet: *The first unambiguous skeletal record for the skates (Batomorphii, Rajiformes) from the early Miocene of Upper Austria*

14:30 - 14:45

Jiachun Li, Zuo-Yu Sun & Da-Yong Jiang: *A new chondrichthyan fauna from the Zhuganpo Member of the Falang Formation at Nimaigu section, Guizhou, China*

14:45 - 15:00

Carolín Gut, Radek Šanda, Jasna Vukić, Timo Moritz, Christoph Gierl & Bettina Reichenbacher: *An actualistic study of the taxonomic significance of skeleton and otolith morphology in Gobius and Pomatoschistus (Teleostei: Gobiiformes)*

15:00 - 15:15

Shuang Liu, Zuo-Yu Sun, Da-Yong Jiang, Cheng Ji & Weicheng Hao: *Conodont biostratigraphy and age of the Early Triassic fish-bearing-nodule levels in the Lower Yangtze Region of South China*

15:15 - 15:30

Pablo Pazos, Candela González Estebenet, Sergio Cocca & Dania Pascua: *The oldest record (pre-Calloviaian) of thyreophoran dinosaur tracks in the Southern Hemisphere: ichnological and geological implications*

15:30 - 15:45

Alain Blieck & Edmonde Razafimahaleo: *On the origin and evolution of the lateral sensory line system of vertebrates*

15:45 - 16:15

Coffee break

Chair: Nour-Eddine Jalil

16:15 - 16:30

Max Langer, Martin Ezcurra, Oliver Rauhut, Michael Benton, Fabien Knoll, Blair McPhee, Diego Pol & Stephen Brusatte: *Saurischia, Ornithoscelida, and the first dinosaurs*

16:30 - 16:45

Yanhong Pan, Wenxia Zheng, Roger Sawyer, Michael Pennington, Xing Xu & Zhonghe Zhou, Mary Schweitzer: *Evolution of the molecular characteristics of feathers: evidence from feathered dinosaur and bird fossils from China*

16:45 - 17:00

Joshua Gauweiler & Joachim Haug: *A morphometric approach to the diversity of marginocephalian dinosaurs including ontogenetic data*

17:00 - 17:15

He Chen, Shunxing Jiang, Xin Cheng, Rui Qiu, Xinjun Zhang, Junxia Wang & Xiaolin Wang: *The third specimen of *Ikrandraco avatar* (Pteranodontoidea) from the Early Cretaceous Jehol Biota, China*

17:15 - 17:30

Alexandre Guillaume, Miguel Moreno-Azanza, Eduardo Puértolas-Pascual & Octávio Mateus: *Crocodylomorph teeth paleobiodiversity from a new locality in the Lourinhã Formation, Portugal (Late Jurassic)*

17:30 - 17:45

Jun Liu, Fernando Abdala & Gabriel S. Bever: *New findings from the Naobaogou Formation (Lopingian, Permian) of Nei Mongol, China and their faunal implications*

17:45 - 18:00

Yuanqing Wang, Jin Meng, Qian Li, Bin Bai, K. Christopher Beard, Xun Jin & Fangyuan Mao: *New data of the Paleogene stratigraphy and mammalian palaeontology in the Erlian Basin, Inner Mongolia, China and its implications to the asian Paleogene biochronology*

Friday July 13th, a.m.

Sessions: S03, S09, S14, S21, S25, S27, S32, S33, S42, S43

Session S03: Back to the sea: from Late Palaeozoic to Cenozoic, the Tetrapod adventure - N. Bardet, V. Fischer, A. Houssaye, S. Jouve, O. Lambert, P. Vincent (continuing)

Amphitheatre 45B

Chair: Peggy Vincent, Valentin Fischer

08:30 - 08:45

Mariana Viglino, Monica Buono, Ewan Fordyce, José Cuitiño & Maximiliano Gaetán: *Fossil odontocetes from Patagonia (Argentina) as a key to understand their evolutionary history during the still enigmatic early Miocene*

08:45 - 09:00

Rodolfo Salas-Gismondi, Jorge Moreno-Bernal, Torsten Scheyer, Marcelo Sánchez-Villagra & Carlos Jaramillo: *Neotropical gavialoids: a case study to explore patterns of longirostry in crocodylians*

09:00 - 09:15

Fabrice Lihoreau, Florian Martin, Guillaume Daver, Stéphane Ducrocq, Helder Gomes Rodrigues, Alexandra Houssaye, Gildas Merceron, Mickaël Mourlam, Maëva Orliac, Kevin Uno & Jean-Renaud Boisserie: *A hippopotamoid adaptative suite: the case study of Bothriodon velaunum (Cuvier, 1824) [Mammalia, Cetartiodactyla] from Ronzon*

09:15 - 09:30

Pavel Gol'din & Maia Bukhsianidze: *Anatomy of Ferecetotherium kelloggi, the earliest crown-group cetacean from the Oligocene of Caucasus*

09:30 - 09:45

R. Ewan Fordyce: *An ancient beaked-whale mimic: a toothless presumed platanistoid dolphin from the Otekaike Limestone (latest Oligocene), Hakataramea Valley, New Zealand*

09:45 - 10:00

Amber Coste, Ewan Fordyce & Carolina Loch: *Form, function, and phylogeny in Late Oligocene tusked dolphins from New Zealand*

10:00 - 10:15

Marcela Gomez-Perez & **Leslie Noè**: *Kronosaurus boyacensis, a Gondwanan marine mega-predator, from the 'Lower Cretaceous Gap' Paja Formation Lagerstätte of Colombia, South America*

10:15 - 10:45

Coffee break

Session S09: Coevolution of life and environments: integrating the palaeoecological, sedimentological and geochemical Records - L. Tackett, L. Tarhan (continuing)

Amphitheatre 45A

Chair: Lidya Tarhan & Lydia Tackett

08:30 - 08:45

Daniel Hembree: *Effects of the Late Paleozoic climate transition on soil ecosystems of the Appalachian Basin: evidence from ichnofossils*

08:45 - 09:00

Liu Lu, Qin Min, Wang Deming & Xue Jinzhuang: *Belowground rhizomes and roots in waterlogged paleosols from the Middle Jurassic of Beijing, China*

09:00 - 09:15

Lee Rozada, Jordan Gônet, Rafael Royo-Torres & Ronan Allain: *Integrative study of the Angeac-Charente bonebed (Berriasian, Lower Cretaceous, Charente, France): vertebrate paleoecology and paleobehaviour implications*

09:15 - 09:30

Chris Mays, David Cantrill, Joseph Bevitt & Andrew Coward: *Polar wildfires and fire-adapted seed dispersal during the Cretaceous global hothouse*

09:30 - 09:45

Gaia Crippa, Andrea Baucon, Fabrizio Felletti, Melanie Leng, Gianluca Raineri, Daniele Scarponi & Lucia Angiolini: *Palaeoenvironmental and palaeoclimatic evolution of the lower Pleistocene Arda River succession (Italy): a multidisciplinary approach*

09:45 - 10:00

Joshua Samuels & Julia Schap: *The structure of rodent and lagomorph communities across the Cenozoic of North America: the importance of regional topography and climatic differences*

10:00 - 10:15

Camilla Crifò, M. Susana Bargo, José Cuitiño, Richard Kay, Matthew Kohn, Robin Trayler, Sergio Vizcaíno, Alejandro Zucol & Caroline Strömberg: *Habitat shift during the Middle Miocene Climatic Optimum of Southern Patagonia recorded in phytolith assemblages*

10:15 - 10:45

Coffee break

Session S14: Evolution of trees and forests - B. Meyer-Berthaux, A.L. Decombeix, P. Gerrienne

Amphitheatre 34A

Chair: Anne-Laure Decombeix & Brigitte Meyer-Berthaud

08:30 - 08:45

Philippe Gerrienne & Borja Cascales-Miñana: *The flora of the uppermost Middle Devonian Ronquières locality, Belgium: the hydraulic efficiency of three woody plants compared*

08:45 - 09:00

Brigitte Meyer-Berthaud, Anaëlle Dambreville, Jean-François Barczy, Anne-Laure Decombeix, Sébastien Griffon & Hervé Rey: *Estimating the carbon content of an early forest*

09:00 - 09:15

Borja Cascales-Miñana, Philippe Gerrienne, Cyrille Prestianni, Philippe Steemans & Chengsen Li: *A new Late Devonian heterosporous woody plant from South China*

09:15 - 09:30

Anne-Laure Decombeix & Brigitte Meyer-Berthaud: *Systematic, evolutive, and functional implications of wood disparity in Mississippian lignophyte trees*

09:30 - 09:45

Xiao Shi, Jianxin Yu & Wenchao Shu: *A new gymnosperm stem from the Lopingian North China, and its palaeoecological implications*

09:45 - 10:00

Ricardo Araujo, Nelson Nhamutole, Zanildo Macungo, Dino Milisse, Manuel Pereira, Anne-Laure Decombeix & Marion Bamford: *The largest fossil forests in Africa: preliminary results from new and revisited localities from the Tete province (Mozambique)*

10:00 - 10:15

Aviwe Matiwane & Rose Prevec: *A new approach to Glossopteris leaf taxonomy embracing morphometric analyses*

10:15 - 10:45

Coffee break

Chair: Anne-Laure Decombeix & Brigitte Meyer-Berthaud

10:45 - 11:00

Carla Harper, Anne-Laure Decombeix, Patricia Ryberg, Rudolph Serbet, Andrew Schwendemann & Edith Taylor: *Skaar Ridge revisited: Insights into a Permian high latitude peat swamp forest ecosystem from Antarctica*

11:00 - 11:15

Yi Zhang, Shaolin Zheng, Yongdong Wang & Yue Hong: *Pleuromeia from the Middle Triassic Linjia flora with typical Paleozoic elements recorded in Benxi, Northeast China*

11:15 - 11:30

Zikun Jiang: *Phototropism in wood trunks: implications for the rotation of North China plate?*

11:30 - 11:45

Chizuru Nishida, Harufumi Nishida, Toshihiro Yamada, Kazuo Terada, Atsushi Yabe, Luis Felipe Hinojosa, Julien Legrand, Patricio Lopez-Sepulveda & Takeshi Asakawa: *New anatomically preserved conifer remains of subfamily Cunninghamioideae (Cupressaceae) from the Late Cretaceous (Maastrichtian) Quiriquina Formation of Cocholque, south Chile*

11:45 - 12:00

Antoine Bercovici, Regan Dunn, Daniel Field, Tyler Lyson & David Fastovsky: *Using dispersed cuticles to evaluate canopy density variation in deep time: the loss of plant cover at the Cretaceous-Paleogene boundary (North Dakota, USA)*

12:00 - 12:15

Benjamin Adroit, Vincent Girard, Jean-Frédéric Terral & Torsten Wappler: *The Plio-Pleistocene biogeographic history of *Parrotia persica* highlighted by a new plant-insect interaction*

12:15 - 12:30

Anaïs Boura, Lucas Llopis, Mathilde Gorse, Ninon Robin, Adeline Kerner, Denise Pons, Mélanie Tanrattana, Marc Philippe, Nima Saedlou, Nicole Salel & Dario De Franceschi: *Softwood from the Boureau's collection: re-examination in the light of the ABleS database*

12:30 - 14:00

Lunch break

Session S21: Konservat-Lagerstätten, Cretaceous and Cenozoic Lagerstätten - S. Charbonnier, J.T. Haug (continuing)

Great Amphitheatre of Muséum (GAM) in Jardin des Plantes

Chair: Didier Merle

08:30 - 08:45

Leslie Noè & Marcela Gomez-Perez: *A new Lower Cretaceous Lagerstätte for Central Colombia: an overview of the Hauterivian-Aptian Paja Formation*

08:45 - 09:00

Gabriel Osés, Setembrino Petri, Gustavo Prado, Bruno Becker-Kerber, Douglas Galante, Cibele Voltani, Guilherme Romero, Marcia Rizzutto, Fabio Rodrigues & Mirian Pacheco: *Widespread pyritization at the Crato Formation (Upper Aptian), Brazil: patterns and possible explanations*

09:00 - 09:15

Leslie Noè, Paula Ordoñez-Pérez, Luisa Rengifo-Cajias & Marcela Gomez-Perez: *Lower Cretaceous marine boring bivalves, from the Paja Formation Lagerstätte of central Colombia, northern South America*

09:15 - 09:30

Hebert Bruno Nascimento Campos & Michaël Paul Jos Nicolaï: *A new specimen of azhdarchoid pterosaur (Pterodactyloidea, Thalassodromidae) from the Santana Formation of Brazil*

09:30 - 09:45

Sonja Wedmann, Dieter Uhl, Thomas Lehmann, Romain Garrouste, André Nel, Bernard Gomez, Krister Smith & Stephan Schaal: *The Konservat-Lagerstätte Menat (Paleocene; France) - an overview and new insights*

09:45 - 10:00

Oliver Wings, Daniel Falk, Márton Rabi & Maria McNamara: *The Eocene Fossil-Lagerstätte Geiseltal (Saxony-Anhalt, Germany) and its Potential for Future Research*

10:00 - 10:15

Raul Esperante, Brenda Geisse, Mateo Ospino & Orlando Poma: *Distribution and taphonomic characteristics of marine mammals in Cerro Hueco la Zorra, Miocene, Pisco Formation, Peru*

10:15 - 10: 45

Coffee break

Chair: Clément Jauvion

10:45 - 11:00

Valentina Rossi, Maria McNamara & Sam Webb: *Melanosome geometry and trace element chemistry reveal soft tissue anatomy in fossil vertebrates*

11:00 - 11:15

Luke McDonald, Vinodkumar Saranathan, Pete Vukusic & Maria McNamara: *Diverse 3D photonic crystal structures in fossil insect scales*

11:15 - 11:30

Giliane Odín, Hans Arwin, Kenneth Järrendahl & Maria McNamara: *Experimental degradation of circularly polarizing scarab beetles: testing the potential for fossilization of cuticular nanostructures*

11:30 - 11:45

Tiffany Slater, Maria McNamara & Patrick Orr: *Experimental degradation of feathers: insights into the origins of mouldic melanosomes*

11:45 - 12:00

Maria McNamara, Fucheng Zhang, Stuart Kearns, Patrick Orr, Andre Toulouse, Tara Foley, David Hone, Christopher Rogers, Michael Benton & Xu Xing: *Exceptionally preserved skin structure reveals the coevolution of skin, feathers and metabolism in feathered dinosaurs and early birds*

12:00 - 12:30

Questions and final discussion

12:30 - 14: 00

Lunch break

Session S25: Mesozoic palaeontology and palaeoenvironments of Indochina -

J. Legrand, T. Tsuihiji, T. Komatsu

Amphitheatre 55A

Chair: Julien Legrand, Takanobu Tsuihiji & Toshifumi Komatsu

09:00 - 09:15

Toshifumi Komatsu, Takumi Maekawa, Yasunari Shigeta, Takanobu Tsuihiji, Julien Legrand, Dang Tran Huyen & Nguyen Duc Phong: *Depositional environments and bivalve assemblages in the Triassic shallow marine facies in the northern part of Vietnam*

09:15 - 09:30

Takumi Maekawa, Toshifumi Komatsu, Yasunari Shigeta & Dang Tran Huyen: *Bio- and chemo-stratigraphic indexes for global correlation of the Smithian-Spathian boundary in Vietnam and Japan*

09:30 - 09:45

Julien Legrand, Toshifumi Komatsu, Hung Dinh Doan, Hung Ba Nguyen & Ha Thai Trinh: *New macro- and microfloral assemblages obtained from the Ninh Binh and Quang Tri Provinces, and their correlation with Lower Mesozoic floras and palynostratigraphy of Vietnam*

09:45 - 10:00

Lynne Bean, Thomas Rich, Anne-Marie Tosolini & Sarah Martin: *Bookending Indochina: A comparison of terrestrial lacustrine Late Mesozoic deposits in Australia and China*

10:00 - 10:15

Mohammad T. Badihagh & Dieter Uhl: *The first record of Phlebopteris dunkeri, Phlebopteris woodwardii (Matoniaceae) and Elatocladus laxus (taxodioid Cupressaceae) from the Middle Jurassic of Iran*

10:15 - 10:45

Coffee break

Session S27: Neogene continental environments in Africa and Eurasia - B. Senut, L. Ségalen, N. Fagel

Room 109 (Towers 44-45, 1st floor)

Chair: Nathalie Fagel, Loïc Ségalen & Brigitte Senut

8:15 - 08:30

Brigitte Senut, Loïc Ségalen & Nathalie Fagel: *Welcoming and Introduction*

08:30 - 08:45

Bastien Mennecart, Loïc Costeur & Antoine Souron: *Dietary diversity in the earliest Miocene ruminant guild from Montaigu-le-Blin/Saint-Gérand-le-Puy (France) inferred from Dental Microwear Texture Analysis*

08:45 - 09:00

Josep Sanjuan, Mohammad Alqudah, Thomas Neubauer & Catherina Khairallah: *Palaeoenvironmental evolution of the Neogene Zahle palaeolake (Bekaa Valley, Lebanon)*

09:00 - 09:15

Nikos Kargopoulos, Socrates Roussiakis, Panagiotis Kampouridis, Georgia Svorligkou & George Theodorou: *First occurrence of Amphiorcyteropus gaudryi (Major, 1888) in Kerassia (Euboea, Greece)*

09:15 - 09:30

Stefanie Penk, Ulrich Schliewen, Melanie Altner & Bettina Reichenbacher: *The earliest record of the Oreochromini (Cichlidae: Pisces) from a Miocene lacustrine deposit in the East African Rift Valley*

09:30 - 09:45

Charalampos Kevrekidis, Martina Valtl, Stefanie Penk, Melanie Altner & Bettina Reichenbacher: *New fossil cichlids from the middle-to-upper Miocene of Kenya: evidence for the first fossil representative of the Etiini*

09:45 - 10:00

Melanie Altner & Bettina Reichenbacher: *Fossils of putative Haplochromini (Teleostei: Cichlidae) from the late Miocene Palaeolake Waril (Central Kenya, East African Rift system)*

10:00 - 10:15

Yong Peng, Stefanie Penk, Carolin Gut & Bettina Reichenbacher: *Can species of Oreochromini (Cichlidae, Teleostei) be distinguished based on the morphological characters of the hard parts alone?*

10:15 - 10:45

Coffee break

Chair: Nathalie Fagel, Loïc Ségalen & Brigitte Senut

10:45 - 11:00

Messaouda Benmessaoud: *Palaeoenvironments of the Ahaggar, Southern Algeria, and newly discovered faunas*

11:00 - 11:15

Djimdoumalbaye Ahounta, Mathieu Schuster, Likius Andossa & Nathalie Fagel: *Clay minerals of the upper Miocene in Toros-Menalla (Chad) and implications for the palaeoenvironments*

11:15 - 11:30

Sarah Musalizi: *Taxonomy and ecology of the fossil freshwater molluscs from Late Miocene palaeolake Obweruka in the Albertine Basin (Uganda)*

11:30 - 11:45

Loïc Segalen, Joane Pouech, Martin Pickford, Dominique Gommery, Sarah Musalizi, Jackson Ssebuyungu & Brigitte Senut: *Environmental reconstruction of the West Nile during the Mio-Pliocene transition based on mammalian faunas*

11:45 - 12:00

Hanwen Zhang, Marco Ferretti & Adrian Lister: *Elephant evolution revisited*

12:00 - 12:15

General Discussion

12:15 - 12:30

Brief oral presentations of posters (2mn/poster)

12:30 - 14:00

Lunch break

Session S32: Palaeobiogeography - S. Kiel

Amphitheatre 44

Chair: Steffen Kiel

08:30 - 08:45

Elizabeth Dowding & Malte Ebach: *Testing Devonian bioregionalisation*

08:45 - 09:00

Christopher Stocker, Mark Williams, Philip Lane, Derek Siveter, Tatsuo Oji, Simon Wallis, Gengo Tanaka & Toshifumi Komatsu: *Silurian and Devonian trilobites of Japan: 'eye witnesses' to the early geological evolution of the Japanese islands*

09:00 - 09:15

Bing Huang, Jisuo Jin & Jiayu Rong: *Diversification patterns of brachiopods after the end Ordovician mass extinction and its palaeobiogeographic significance*

09:15 - 09:30

Huai-Hsuan Huang, Rupert Sutherland, Gerald Dickens, Peter Blum, the Expedition 371 Scientists & Moriaki Yasuhara: *Eocene shallow-water ostracods from the deep Tasman Sea (IODP Expedition 371)*

09:30 - 09:45

Sérgio Ávila, Raphaël Paris, Ricardo Ramalho, Emilio Rolán, Esther Martín González, Carlos Melo & Ricardo Cordeiro, José Madeira: *Using glacial age megatsunami fossil deposits to unveil palaeobiogeographical patterns and processes in volcanic oceanic islands*

09:45 - 10:00

Manuel Steinbauer: *The legacy of past environmental changes on diversity of oceanic islands*

10:00 - 10:15

Kazutaka Amano, Krzysztof Hryniewicz & Robert Jenkins: *Marine connections between the northern Pacific and north Atlantic regions during the Paleocene*

10:15 - 10:45

Coffee break

Chair: Steffen Kiel

10:45 - 11:00

Nathan Smith: *New Information on the Dinosaurs of the Hanson Formation, and patterns of Early Mesozoic Vertebrate Evolution and Paleobiogeography in Antarctica*

11:00 - 11:15

Brandon Peacock, Kenneth Angielczyk & Christian Sidor: *Beyond the Karoo: Patterns of ecological and taxonomic diversity and recovery among vertebrates from the End-Permian mass extinction*

11:15 - 11:30

Carles Martín-Closas, Alba Vicente, Josep Sanjuan & Jordi Pérez-Cano: *The role of Iberian insularity in the Cretaceous evolution of charophytes*

11:30 - 11:45

Alexandre Pohl, Marie Laugié, Julien Michel, Cyprien Lanteaume, Christopher Scotese, Camille Frau, Emmanuelle Poli, Jean-Pierre Masse, Yannick Donnadiou & Jean Borgomano: *Quantifying the palaeogeographical driver of Cretaceous carbonate platforms development using niche modeling*

11:45 - 12:00

Lea Rausch, Mehmet Cihat Alçiçek, Marius Stoica, Sergei Lazarev, Christiaan G. C. Van Baak & Wout Krijgsman: *A Miocene – Early Pliocene Paratethyan type ostracod fauna from the Denizli Basin (southwestern Anatolia) and its paleogeographic implications*

12:00 - 12:15

Konstantina Agiadi, Angela Girone, Efterpi Koskeridou, Pierre Moissette, Jean-Jacques Cornée, Frédéric Quillevere & Vasileios Karakitsios: *Pleistocene marine fish biogeography and paleoenvironmental implications in the eastern Mediterranean*

12:15 - 12:30

Roman Croitor: *The main paleobiogeographic features of early human dispersals in Eurasia*

12:30 - 14:00

Lunch break

Session S33: Shell beds through time: implications for palaeoecology, taphonomy and evolution - J.H. Nebelsick, M. Zuschin, A. Tomasovych

Amphitheatre 45A

Chair: James Nebelsick, Martin Zuschin & Adam Tomašových

10:45 - 11:00

Martin Zuschin, Ivo Gallmetzer, Alexandra Haselmair & Adam Tomašových: *Ecological information from transgressive shell beds*

11:00 - 11:15

Christopher Harris & Robert Gess: *A monotaxic lingulid brachiopod bed provides information on palaeoenvironments in the Upper Devonian Witpoort Formation (Witteberg Group, Cape Supergroup, South Africa)*

11:15 - 11:30

Peter O. Baumgartner, Dionisio Rodriguez, Goran Andjic, Claudia Baumgartner-Mora, Antoine Picitet, Marino Protti-Quesada & Eli Silver: *Aturia (Nautilida) shell beds in the Upper Eocene*

11:30 - 11:45

Lorenzo De Bortoli, Edoardo Martinetto & Šárka Hladilová: *Why the oysters are often overlooked? The challenging case of Pliocene oysters from Valle Botto Area (at, NW Italy): Taxonomy, paleoecology and morphometry*

11:45 - 12:00

James Nebelsick, Zain Belaústegui, Andrea Mancosu, Jeffrey Thompson & Louis Zachos: *Clypeasteroid echinoid shell beds: Sedimentology, taphonomy and paleoecology*

12:30 - 14: 00

Lunch break

Session S42: "Early" vertebrates: from fossils to genomes - A. Pradel, D. Davesne, R. Sansom (continuing)

Amphitheatre 34B

Chair: Sophie Sanchez & Donald Davesne

08:45 - 09:00

Allison Bronson, Alan Pradel & John Maisey: *Well-preserved symmoriiform cartilage from the Late Mississippian Fayetteville Shale of Arkansas, USA*

09:00 - 09:15

David Marjanović: *Yes, we can homologize skull (and other) bones of actinopterygians and tetrapods*

09:15 - 09:30

Sam Giles & Matt Friedman: *Endoskeletal anatomy of platysomids supports a Carboniferous origin for Chondrostei*

09:30 - 09:45

Thodoris Argyriou, Sam Giles & Matt Friedman: *Homology and morphofunctional significance of accessory hyoid-arch elements of actinopterygians: new data from μ CT on fossil and recent forms*

09:45 - 10:00

Werner Schwarzhans, Giorgio Carnevale, Hermione Beckett, Matt Friedman & Michael Frese: *The power of otoliths in situ for the reconstruction of fossil teleost evolution*

10:00 - 10:15

Alessio Capobianco, Alison Longbottom & Matt Friedman: *Phylogenetic affinities of marine osteoglossomorphs and the role of marine dispersal in osteoglossomorph biogeography*

10:15 - 10: 45

Coffee break

Chair: Allison Bronson & Alan Pradel

10:45 - 11:15

Matt Friedman, Sam Giles, Thodoris Argyriou, Michael Coates & Stephanie Pierce: *Keynote: Drawing back the veil: diverse internal cranial structure in Carboniferous-Permian fossils and its bearing on the earliest actinopterygian radiation*

11:15 - 11:30

Louise Souquet & Nicolas Goudemand: *Exceptional basal body preservation in Early Triassic conodont elements from Oman: functional and developmental implications*

11:30 - 11:45

Leif Tapanila, Jesse Pruitt, Cheryl Wilga & Alan Pradel: *Saws and scissors: Late Paleozoic experimentation with symphyseal dentition in edestoid fish*

11:45 - 12:00

Ervins Lukševičs & Alexander Ivanov: *Squamation and dilemma of the Devonian asterolepid antiarchs: better swimming abilities or finer protection*

12:00 - 12:15

Rohan Mansuit, Marc Herbin, Anthony Herrel & Gaël Clément: *The endoskeletal development of pectoral and pelvic fins of the coelacanth Latimeria: an extant model for paleontological interpretations*

12:15 - 12:30

Tom Challands, Mark Naylor & Marco Castiello: *The first functional analysis of the lateral line system in fossil fish*

12:30 - 14: 00

Lunch break

Session S43: Open session - D. Gommery, M.B. Forel

Amphitheatre 55B

Chair: Dominique Gommery

08:30 - 08:45

Roman Croitor & Jean-Philippe Brugal: *Ecological interactions between Pleistocene carnivore and herbivore communities in western Eurasia: Implications for the human ecological niche*

08:45 - 09:00

Marine Cazenave: *The skeletal maturation of Paranthropus robustus*

09:00 - 09:15

Martin Pickford: *The Tahag Rhino, Atakor, Southern Algeria*

09:15 - 09:30

Adrian Lister & Juha Saarinen: *Behavioural leads in evolution: New data on the evolution of Proboscidea (elephants and their relatives) through the Neogene to Quaternary of Africa*

09:30 - 09:45

Marina Aguirre, Sebastián Richiano, Héctor Panarello, David Dettman, Bernd Schöne, Mariano Donato, Pedro Castellanos, Karen Davies & Ester Farinati: *Historical perspectives to modern day conditions in the southern Southwestern Atlantic: glimpses from Late Quaternary molluscan assemblages of Argentina*

09:45 - 10:00

Arzu Javadova & Maria Zenina: *The Quaternary deposits of the South Caspian and the adjacent areas on ostracoda fauna*

10:00 - 10:15

Michael Pittman & Thomas Kaye: *Laser-stimulated fluorescence: soft tissue and skeletal detail revealed in micro and macro fossils*

10:15 - 10:45

Coffee break

Chair: Dominique Gommery

10:45 - 11:00

Jakub Prokop, Martina Pecharová, André Nel & Thomas Hörnschemeyer: *The significance of wing base in Palaeodictyoptera (Insecta: Pterygota): a case study of Dunbaria Tillyard*

11:00 - 11:15

Khizar Samiullah, Memoona Nazish, Xijun Ni & Riffat Yasin: *New fossil remains of even toed mammals from the Late Miocene of Pakistan: evolution, systematics and biogeography*

11:15 - 11:30

Khizar Samiullah, Muhammad Akhtar, Rana Fazal & Humaira Sarfraz: *Taxonomic studies of fossil bovids from the Lower Siwalik Hills of District Chakwal, Punjab, Pakistan*

11:30 - 11:45

Muhammad Chaudhary, Khizar Samiullah, Khurram Feroz, Yasin Riffat & Misbah Jabeen: *Systematic study of fossil elephants from Dhok Pathan Formation, Middle Siwalik deposits of Pakistan*

11:45 - 12:00

Alain Blicek, David Elliott, Philippe Janvier, Susan Turner, Vadim Glinskiy, Gai Shi-kun, Marion Chevrinais, Damien Germain & Jean Goedert: *Handbook of Paleoichthyology, vol. IA, « Agnatha » I, H.-P. Schultze ed., Verlag Dr. Friedrich Pfeil, München (FRG) — State-of-the-art with new perspectives in Eco-Etho-Phylo-Evo-Devo*

12:30 - 14:00

Lunch break

Session S43: Open session - D. Gommery, M.B. Forel

Room 105 – 1st floor – Towers 44-45

Chair: Marie-Béatrice Forel

08:30 - 08:45

Shamindri Tennakoon, Roger Portell, Michał Kowalewski, Elizabeth Petsios & Carrie Tyler: *Morphometric analysis of Cenozoic cassids (Mollusca: Gastropoda) from Florida*

08:45 - 09:00

Alysson Mazoni, Lucas Vazquez & Carolina Zabini: *Use of convolutional neural networks to automatically identify holes in brachiopod fossil using pictures*

09:00 - 09:15

Wendy Taylor, **Geoffrey Bruce**, Steven Semken, Chris Mead, Lev Horodyskyj & Ariel Anbar: *Game based learning using adaptive virtual field trips to explore the Mesozoic*

09:15 - 09:30

Philipp Wagner, Joachim Haug & Carolin Haug: *Morphological diversity of calmanostracan crustaceans in time: ontogeny and palaeontology*

09:30 - 09:45

Valentin Rineau, Jean-Pierre Massé & Loïc Villier: *A new cladistic insight at the comparative anatomy, phylogeny and systematics of rudists (Bivalvia, Hippuritida)*

09:45 - 10:00

Stijn Goolaerts & Pascal Godefroit: *A 'double whammy' for dinosaurs and ammonoids: fake news or the real deal?*

10:00 - 10:15

Stefan Bengtson, Magnus Ivarsson, Birger Rasmussen & Fabien Humbert: *Mycelial fossils in the Palaeoproterozoic deep biosphere*

10:15 - 10:45

Coffee break

Chair: Marie-Béatrice Forel

10:45 - 11:00

Carl Simpson: *Bryozoan strategies for neutralizing evolution within their colonies*

11:00 - 11:15

Delphine Desmares, Isabelle Kruta, Gwendoline Coroyer, Isabelle Rouget & Danièle Grosheny: *X-ray tomography contribution to the palaeobiology of Upper Cretaceous planktonic foraminifera*

11:15 - 11:30

Danae Thivaoui, Mathias Harzhauser, Hara Drinia & Efterpi Koskeridou: *Molluscan assemblage shift in a littoral setting at the base of the Neogene*

11:30 - 11:45

Vanessa J. Roden, Imelda Hausmann, Martin Zuschin & Wolfgang Kiessling: *Beta diversity in Triassic and modern marine communities*

11:45 - 12:00

Imelda Hausmann, Alexander Nützel, Mike Reich & Vanessa Roden: *Diversity and palaeoecology of tropical marine soft-bottom assemblages from the Late Triassic (Cassian Formation, northern Italy)*

12:00 - 12:15

Alexander Nützel: *Evolutionary history of higher gastropods - fossil milestones*

12:15 - 12:30

Valeria Mikhalevich: *Evolution of Foraminifera reflected in their geological record*

12:30 - 14:00

Lunch break

Session S43: Open session - D. Gommery, M.B. Forel

Room 107 – 1st floor – Towers 44-45

Chair: Carine Randon

08:30 - 08:45

Thomas Arbez & Jean-Sébastien Steyer: *Early tetrapod relationships: new results based on well-preserved specimens*

08:45 - 09:00

Max Langer, Julia Desojo, Atila Da-Rosa, Miguel Ezpeleta, Martin Ezcurra, Agustin Martinelli, Belén von Baczko, Lucas Fiorelli, Felipe Montefeltro & Jahandar Ramezani: *New tetrapod specimens and chronostratigraphy of the Late Triassic Ischigualasto Formation at Cerro Las Lajas (La Rioja Province), northwestern Argentina*

09:00 - 09:15

Jörg Fröbisch, Christian Kammerer, Hans-Dieter Sues, Eberhard Frey, Florian Witzmann & Maren Jansen: *The Korbach fissure fill – a unique window into Late Permian terrestrial vertebrate ecosystems of central Europe*

09:15 - 09:30

Saverio Bartolini Lucenti & Lorenzo Rook: *Crossing borders: Early Pliocene - Middle Pleistocene expansion of the genus Nyctereutes (Mammalia, Canidae) across the Old World*

09:30 - 09:45

Guillaume Billet & Jérémie Bardin: *Morphological phylogenetics, character construction and serial homology: a case-study on the evolution of cingulum on placental upper molars*

09:45 - 10:00

Helder Gomes Rodrigues, Jean-Renaud Boisserie, Maëva Orliac, & Fabrice Lihoreau: *Evolution of the dental eruption sequence in Cetartiodactyla (Mammalia) and phylogenetic insight: new evidence from fossils*

10:00 - 10:15

Julia Tejada, Bruce MacFadden, Lizette Bermudez, Gianmarco Rojas, Rodolfo Salas & John Flynn: *Body mass predicts diet-bioapatite $\delta^{13}\text{C}$ isotope enrichment in herbivorous mammals*

10:15 - 10:45

Coffee break

Chair: Carine Randon

10:45 - 11:00

Joshua Samuels, Richard Zakrzewski, Keila Bredehoeft, Cheyenne Crowe, Danielle Oberg, Julia Schap, Blaine Schubert, Steven Wallace, Christopher Widga & Jim Mead: *The Gray Fossil Site of Tennessee: a unique record of mammalian life in the early Pliocene of eastern North America*

11:00 - 11:15

Xiaoyu Lu, Olivier Maridet, Damien Becker & Loïc Costeur: *Evolution and diversification of dormice: first phylogenetic analysis*

11:15 - 11:30

Alberto Boscaini, Timothy Gaudin, Bernardino Mamani Quispe, Pierre-Olivier Antoine & François Pujos: *New insights in the evolutionary history and the paleobiology of the ground sloth Simomylodon uccasamamensis (Xenarthra, Mylodontidae) from the Pliocene of the Bolivian Altiplano*

11:30 - 11:45

Laura Domingo, Rodrigo L. Tomassini, Claudia I. Montalvo, Paul L. Koch & M. Teresa Alberdi: *The Great American Biotic Interchange (GABI) revisited: a perspective from the stable isotope record of Argentine fossil mammals*

11:45 - 12:00

François Pujos, Martín R. Ciancio & Esperanza Cerdeño: *Late Paleogene xenarthrans from Quebrada Fiera (west-central Argentina): implication for the paleogeography of cingulates (armadillos and glyptodontids) and the basal condition in megatherioid and mylodontid sloths*

12:00 - 12:15

François Pujos, Gerardo De Iuliis, Alberto Boscaini & Cástor Cartelle: *New Pleistocene mylodontid ground sloths from the Quaternary of Brazil*

12:15 - 12:30

M. Soledad Domingo, David M. Martín Perea, Catherine Badgley & Juan J. Negro: *The bones of Doñana National Park (Spain): post-mortem modifications in bones and carcasses from a modern Mediterranean ecosystem*

12:30 - 14:00

Lunch break

Session S43: Open session - D. Gommery, M.B. Forel

Amphitheatre 55A

Chair: David A.T. Harper

10:45 - 11:00

Blaine Schubert, Joaquin Arroyo-Cabrales, James Chatters, Leopoldo Soibelzon, H. Gregory McDonald, Christopher Widga, Joshua Samuels, Keila Bredehoeft, Dominique Rissolo & Pilar Luna-Erreguerena: *Submerged caves of the Yucatán reveal Late Cenozoic biodiversity and faunal interchange in Middle America*

11:00 - 11:15

David Harper, Mabel La Turner, Stephen Donovan & Roger Portell: *Morphometric analyses of Thecidellina (Brachiopoda) from the upper Cenozoic of Curaçao: A record of attachment and modified shape*

11:15 - 11:30

Kevin Jiménez-Lara, Jhon González, Andrés Vanegas & Carlos Jaramillo: *The first skull of a Neogene Vermilinguan (Xenarthra, Pilosa) from the Inter-tropical Americas: Evolutionary significance*

11:30 - 11:45

Corentin Bochaton, Salvador Bailón, Valentin Conche, Monica Gala, David Cochard, Aurélien Royer, Emmanuelle Stoezel & Arnaud Lenoble: *Evolution of the terrestrial vertebrate diversity of Marie-Galante Island (French West-Indies) during the last 40 000 years*

11:45 - 12:00

Emanuela Di Martino, Paul Taylor, Lee Hsiang Liow & Roger Portell: *Anomia-associated bryozoans from the upper Pliocene (Piacenzian) lower Tamiami Formation of Florida, USA*

12:00 - 12:15

Marcelo Sánchez-Villagra, Jorge Carrillo-Briceño, Madlen Stange, Juan Carrillo, Walter Salzburger & Michael Matschiner: *The evolution of shark, ray and catfish diversity on Tropical America and the closure of the Central American Seaway – a palaeontological and molecular examination*

12:30 - 14: 00

Lunch break

Poster session

All the posters will be presented throughout the Fossil Week (Monday to Friday) and grouped by session

Some sessions have only oral presentations and no posters.

Session S02: Angiosperms, from the beginning to their diversification

0201 - Carlos Alberto Góis-Marques, Juan Manuel Rubiales, Lea De Nascimento, Miguel Menezes De Sequeira, José María Fernández-Palacios & José Madeira: *Holocene vegetation of Faial Island (Azores archipelago, Portugal) buried by recurrent explosive volcanism: taphonomy, palaeodiversity and palaeoecology*

0202 - Eliana Coturel, Ana Julia Sagasti & Eduardo Morel: *The Jurassic flora of Nestares Formation, Neuquen Basin, Argentina*

0203 - Julien Legrand, Toshihiro Yamada, Naoki Ikegami & Harufumi Nishida: *Clarification of the paleovegetation and paleoenvironments of the Upper Cretaceous Mifune Group, Southwest Japan*

0204 - Valentina Markevich, Lina Golovneva, Pavel Alekseev, Eugenia Bugdaeva & Elena Volynets: *Albian Angiosperms of Partizansk Basin (Primorye Region, Far East of Russia)*

0205 - Zhen Tang, Yi Zhang, Serge Naugolnykh, Tao Qin, Lu Shi, Junhao Huang & Changqing Zheng: *Ufadendron elongatum sp. nov., an Angaran element of lycopsids from the Upper Permian of Inner Mongolia, China*

0206 - Mélanie Tanrattana, Anaïs Boura & Dario De Franceschi: *Assessing mid-Paleocene climate using fossil leaves*

0207 - Michael Stephenson, Sa'ad Zeki Al-Mashaikie & Waseem Kurukchi: *Palynological assemblages across the Hercynian unconformity in Western Iraq*

0208 - Xiaoyan Liu & Jianhua Jin: *The diversity of Fagaceae in Paleogene of South China and its implications*

Session S03: Back to the sea: from Late Palaeozoic to Cenozoic, the Tetrapod adventure

0301 - Alexander Ashley, Irina Koretsky & Sulman Rahmat: *Ecomorphotypes in the family Phocidae (true seals) supported by evidence from other terrestrial and marine vertebrates*

0302 - Nathalie Bardet, Hélène Bourget, Frédéric Dumont, Patrick Gardet, Fabien Hobléa & Jocelyn Falconnet: *First Mosasauridae (Reptilia, Squamata) in the Late Campanian (latest Cretaceous) of Savoie (Chartreuse Massif, French Alps)*

0303 - Jun Chai, Da-Yong Jiang, Hao Lu, Jia-Chun Li, Zuo-Yu Sun: *The palaeoenvironmental characteristics of Xingyi Keichousaurus fauna*

0304 - Marta Fernandez, Mónica Buono, José Cuitiño: *The radiation of baleen whales (Cetacea: Mysticeti): insights from the Miocene record of Patagonia (Argentina).*

0305 - Alexandra Houssaye, Aurore Canoville & Nicole Klein: *Uncommon vertebral histological and microanatomical features in sauropterygians*

0306 - Irina Koretsky & Sulman Rahmat: *Origin and dispersal of true seals (Family Phocidae) based on recent fossil evidence*

0307 - Florencia Paolucci, Mónica Buono & Marta Fernandez: *New insights on Diaphorocetus poucheti: a Physeteroidea (Cetacea, Odontoceti) from the early Miocene of Patagonia (Argentina)*

0308 - Zuoyu Sun, Dayong Jiang, Hao Lu, Min Zhou, Cheng Ji, Jiachun Li, Xue Wang, Jun Cai & Peigang Ni: *Integrated biochronology and age of the Middle Triassic Xingyi Fauna, South China*

0309 - Peggy Vincent, Anne-Sabine Grosjean, Guillaume Suan, Baptiste Suchéras-Marx, Kevin Janneau, Myette Guimar, Didier Bert, Vincent Perrier, Guillaume Guinot, Jorge Ferreira, Jean-Michel Brazier, Estel Sarroca & Jeremy Martin: *Plesiosaur remains associated with a rich marine fauna from the Albion of southeastern France*

0310 - Nikolay Zverkov, Valentin Fischer, Daniel Madzia & Roger Benson: *Evolution and disparity of pliosaurid teeth and the influence of the Jurassic-Cretaceous transition*

Session S04: Big Data in Palaeontology: sharing knowledge for leveraging research options

0401 - Samuel Ginot & Nicolas Goudemand: *Large-scale study of ecomorphological trends in conodonts.*

0402 - Lindsay Walker, Austin Hendy, Erica Krimmel & Jann Vendetti: *Catalyzing new research on the Cretaceous seas of California*

Session S05: Biodiversity changes through times: crisis and radiations

0501 - Sérgio Ávila: *The palaeobiodiversity of the Azores Archipelago (NE Atlantic): from the Early Pliocene to the Recent*

0502 - Antoine Bercovici, Jacqueline Richard, Tyler Lyson & Dean Pearson: *Survival of vertebrates after the Cretaceous–Paleogene mass extinction event: did body-size matter?*

0503 - William Foster, Silvia Danise, Gregory Price & Richard Twitchett: *Paleoecological analysis of benthic recovery after the late Permian mass extinction event in eastern Lombardy, Italy.*

0504 - Andrzej Kaim & Sofia Bakaeva: *The advent of Neogastropoda according to the fossil record*

0505 - Richard Kelly, Michael Benton & Andrew Ross: Impact of the end Triassic mass extinction on insect diversity and ecology

0506 - Guillaume Le Hir, Frédéric Fluteau, Baptiste Suchéras-Marx, Yves Godderis: *The K–PG boundary: geological events, marine acidification and collapse of primary producers*

0507 - Yuanzheng Lu, Xin Li & Shenghui Deng: *Palynological succession across the terrestrial Triassic – Jurassic boundary in the Junggar Basin, NW China*

0508 - Valentina Markevich, Eugenia Bugdaeva & Ge Sun: *Palynoflora at the K-T boundary in Amur (Heilongjiang) River région, Russia*

0509 - Yasuhisa Nakajima, Yasunari Shigeta, Alexandra Houssaye & Martin Sander: *Morphology and osteohistology of new Early Triassic ichthyosauriform fossils from the Russian Far East*

0510 - Herwig Prinoth & Renato Posenato: *Upper Permian bivalves from the Bellerophon Formation (Dolomites, northern Italy) and biodiversity drop related to the end-Permian mass extinction*

0511 - Melanie Sorman, Ashley Dineen, Peter Roopnarine & Carrie Tyler: *Paleocommunity dynamics in the western Tethys following the end-Triassic extinction*

0512 - Xiangdong Wang, Le Yao & Wei Lin: *Permian rugose corals in the world*

0513 - Bo Wang, Maria Lara, Ana Zavattieri & Jacek Szwedo: *Diverse hemipteran insects from the Upper Triassic of Argentina*

0514 - Yizhi Xu, Bingcai Liu, Ning Yue, Shi Liu, Yi Zhang, Shaolin Zheng & Yongdong Wang: *A new species of Lobatannularia recorded from the Middle Triassic of China with its paleoclimate and paleoenvironmental implications*

S06 Biominerals through time: evolution, taphonomy and traces in the geological record

0601 - Gaia Crippa, Lucia Angiolini, Monica Dapiaggi & Giovanni Pasinetti: *The carrier shell Xenophora crispa (König, 1825): microstructure and agglutination process*

0602 - Akito Ishikawa, Keisuke Shimizu, Yukinobu Isowa, Takeshi Takeuchi, Manabu Fujie, Michinari Sunamura, Keiji Kito, Noriyuki Satoh & Kazuyoshi Endo: *A combined proteomic and transcriptomic analysis of shell matrix proteins in the pond snail Lymnaea stagnalis*

0603 - Marco Romanin, Gaia Crippa, facheng ye, Uwe Brand, Maria Aleksandra Bitner, Danièle Gaspard, Verena Häussermann & Jürgen Laudien: *Which is the optimal shell-part to sample for geochemical analyses? Trace element and stable isotope compositions of five recent brachiopod species*

0604 - Isabelle Rouget, Isabelle Kruta, Vincent Mouchi, Léo Pazzé, Yannicke Daupin, Loïc Ségalen & Neil Landman: *Reading the age of an ammonite from its jaws*

S07 Bird in the past environments

0701 - Juan Benito, Bhart-Anjan Bhullar, David Burnham, Laura Wilson, Daniel Field: *New Ichthyornis specimens: shedding new light on a classic taxon*

0702 - Albert Chen & Daniel Field: *Shining a light on nightbird relationships: a total-evidence phylogeny of Strisores*

0703 - Fabien Knoll, Luis Chiappe, Sophie Sanchez, Russell Garwood, Nicholas Edwards, Roy Wogelius, William Sellers, Phillip Manning, Francisco Ortega & José Luis Sanz: *An exceptional perinate Enantiornithes from the Lower Cretaceous of Spain and its implications for ossification pattern in early birds*

0704 - Zhiheng Li, Julia Clarke, Chad Eliason, Thomas Stidham, Tao Deng & Zhonghe Zhou: *Vocal specialization through tracheal elongation in an extinct Miocene pheasant from China*

0705 - Fiann Smithwick, Lisa Sánchez, Gerald Mayr & Jakob Vinther: *Colour patterns in the stem upupiform Messelirrisor*

0706 - Yachun Zhou, Corwin Sullivan & Fucheng Zhang: *Tooth reduction in Mesozoic birds had a negligible effect on body mass*

S09 Coevolution of Life and Environments: Integrating the Palaeoecological, sedimentological and geochemical records

0901 - Hugo Corbi, Paula Diz & Irene Peñalver-Clavel: *Mid to late Pleistocene productivity changes in the East Equatorial Pacific from benthic foraminiferal assemblages*

0902 - Hugo Corbi, Patricio Guillermo Villafañe, Carlos Cónsole-Gonella & Francisco Ruiz-Sánchez: *Facies characterization and sedimentological scenario of the Messinian stromatolites from Western Mediterranean (Northern Bajo Segura Basin)*

0903 - Débora Diniz, Paula Dentzien-Dias, Heitor Francischini, Leonardo Kerber, Daniel Cardia, Luciene Camossi & Reinaldo Bertini: *Microinclusions (palynomorphs and paleoparasites) recovered from a Late Pleistocene carnivore coprolite from southern Brazil*

0904 - Javier Dorador, Francisco J. Rodríguez-Tovar, José F. Cabrera-Ortíz & Fátima Abrantes: *Pleistocene palaeoenvironmental changes in the Western Iberian margin: integrative ichnological and TOC analysis*

0905 - Kazuyoshi Endo, Manabu Fukui, Noriyuki Suzuki, Yasumitsu Ogra, Takafumi Hirata, Tsuyoshi Komiya, Naohiko Ohkouchi, Takeshi Kawashima & Eiichi Tajika: *Metabolic Time Machine: an emerging field of geogenomics*

0906 - Frédérique Eynaud, Mélanie Wary & Aurélie Penaud: *Transfer functions derived from planktonic microfossils and their use to reconstruct past sea-surface conditions: strengths and limits?*

0907 - Lyndsey Farrar, Erin Graves, Elizabeth Petsios, Roger Portell, Carrie Tyler & Michal Kowalewski: *Characterizing traces of predation and parasitism on fossil echinoids*

0908 - Katrin Heindel, William Foster, Sylvain Richoz, Daniel Birgel, Vanessa Roden, Aymon Baud, Rainer Brandner, Leopold Krystyn, Tayebah Mohtat, Erdal Koşun, Richard Twitchett & Joern Peckmann: *Lipid biomarkers and invertebrates reveal that microbialites on the Neotethyan platform formed in oxygenated environments following the latest Permian mass extinction*

0909 - Francisco J. Rodríguez-Tovar & Olmo Miguez-Salas: *Ichnofabric analysis of deep-sea calcilutites affected by turbidites and bottom currents at the Eocene of Cyprus: macrobenthic response to palaeoenvironmental conditions*

0910 - Ho Il Yoon, Kyu-Chul Yoo, Yong Il Lee, Jae Il Lee, Byong-Kwon Park, Yeadong Kim & Sung-Ho Kang: *Vast Holocene diatom mat deposits and their relationship to rapid sinking of diatom blooms by downslope shelf water off the northwestern Weddell Sea, Antarctica*

S10 Conservation paleobiology and historical ecology of marine ecosystems

1001 - Matthias Nagy, Gloria Quell, Enge Annekatrin, Petra Heinz, Martin Zuschin & Paolo G. Albano: *Variation of benthic foraminiferal assemblages from an area with coralligenous substrate in a sediment core off Northern Israel*

1002 - Jan Steger, Bella Galil, Anna Hinterplattner, Martin Zuschin & Paolo G. Albano: *Assessing the impact of the Lessepsian invasion on soft substrate assemblages on the Israeli Mediterranean shelf – a molluscan live-dead agreement study*

S11 Data, dispersals and interchanges through time: a land mammal perspective

1101 - Samuel Douillez, Philippe Münch, Gilles Merzeraud, Marcos Fernández-Monescillo, Rubén Andrade Flores, Pierre-Olivier Antoine, Bernardino Mamani Quispe, Laurent Marivaux, Mercedes Prámparo & François Pujos: *A multidisciplinary study of upper Neogene continental deposits from Corque basin, central Altiplano, Bolivia: sedimentary evolution and faunal changes*

1102 - Morgane Dubied, Floréal Solé, Kevin Le Verger & Bastien Mennecart: *First partial cranium of the Hyaenodon type species, H. leptorhynchus (Mammalia, Hyaenodonta) – consideration on the niche partitioning of the European carnivorous mammals during the Paleogene*

1103 - Fangyuan Mao, Shundong Bi, Yuanqing Wang & Jin Meng: *Dental structures and microwear reveal mosaic diversity and disparity of euharamiyidans in the adaptive radiation of mammals during the Middle-Late Jurassic*

1104 - Laurent Marivaux & Myriam Boivin: *Important gaps in the fossil record of Paleogene hystricognathous rodents revealed by dental morphology-based phylogeny of taxa from Asia and Africa: paleobiogeographical implications*

1105 - Yuichiro Nishioka: *Lower Miocene pecorans (Mammalia, Artiodactyla) from Japan*

1106 - Teodor Obadă: *Note on the zygodont mastodonts from the Pliocene-Pleistocene of Europe*

1107 - Bei Zhang, Xi Chen & Hao-wen Tong: *Tooth remains of Late Pleistocene moschid and cervid (artiodactyls) from Yangjiawan and Fuyan Caves of southern China*

S12 Early animal life

1201 - Frances Dunn, Alexander Liu & James Gehling: *The anatomy of Arborea arborea: a late Ediacaran eumetazoan*

1202 - Jan Ove Ebbestad, Frida Hybertsen, Sören Jensen, Anette Högström, Wendy Taylor, Magne Høyberget, Guido Meinhold & Zhiji Ou: *Distribution of Sabellidites cambriensis (Annelida?) in the Ediacaran–Cambrian succession on the Digermulen Peninsula, Arctic Norway*

1203 - Yuyang He, Cong Peiyun, Gregory Edgecombe, Yu Liu & Xianguang Hou: *Developmental patterns in leanchoilid arthropods from the early Cambrian Chengjiang biota*

1204 - Richard Howard, Xiaoya Ma, Gregory Edgecombe, Philip Donoghue, Jesus Lozano-Fernandez, Davide Pisani & Mathew Wills *The deep evolution of Ecdysozoa*

1205 - Andrey Ivantsov: *The Ediacaran organism Rangea as a possible source of three different forms of macrofossils*

1206 - Igor Korovnikov: *The oldest trilobites from Siberia*

1207 - Qiang Ou, Jian Han, Zhifei Zhang, Degan Shu, Ge Sun & Georg Mayer: *Three Cambrian fossils assembled into an extinct body plan of cnidarian affinity*

1208 - Yefei Shao, Zhe Chen, Chuanming Zhou & Xunlai Yuan: *New materials of Hiemalora from Dengying Formation in the Yangtze Gorges area, South China*

1209 - Jean Vannier, Muriel Vidal, Robin Marchant, Khadija El Hariri, Khaoula Kouraiss, Abderrazak El Albani, Arnaud Mazurier & Emmanuel Martin: *Collective behaviour in trilobites from the Lower Ordovician of Morocco*

1210 - Bin Wan, Zhe Chen, Xunlai Yuan, Ke Pang, Chengguo Guan, Xiaopeng Wang, Santosh Pandey & Shuhai Xiao: *A tale of three taphonomic modes: Flabellophyton from the Ediacaran Lantian and Dengying formations in South China*

1211 - Maria Zakrevskaya: *Age variability of the Late Vendian microbial mats of the southeastern White Sea region*

S14 Evolution of trees and forests

1401 - Xiaohong An: *Phytoliths from conifers*

1402 - Isabel Christiano-de-Souza, Mary Elizabeth Bernardes-de-Oliveira, Johanna Van Konijnenburg-Van Cittert: *New cones of aff. Welwitschiostrobus from the Crato Flora, Late Aptian of Northeastern Brazil.*

1403 - José B. Diez, Luis Miguel Sender, Harufumi Nishida & Fidel Torcida Fernández-Baldor: *Diversity of trunks of genus Cycadeoidea Buckland ex Lindley et Hutton (Bennettitales) in the Lower Cretaceous deposits of north Spain*

1404 - Christopher Harris & Robert Gess: *Archaeopteris, the earliest tree in South Africa, makes its appearance in the Upper Devonian (Famennian) Witpoort Formation.*

1405 - Malo Tartevet & Anne-Laure Decombeix: *(Pro)Gymnosperms from the Early Carboniferous of the Montagne Noire: morphoanatomical disparity of wood and functional implications*

1406 - Yongdong Wang, Aowei Xie, Ning Tian & Xiaoping Xie: *A Jurassic forest reconstruction and palaeoecology in the Sichuan Basin of southern China*

S16 3D imaging of fossils: novel approaches, advances and data management

1601 - Rika Baba, Akio Yoneyama & Keiichi Takahashi: *Three-dimensional non-destructive imaging method of structural and elemental information using scattering X-rays*

1602 - Akio Yoneyama, Riaka Baba & Yasuharu Hirai: *Detailed three-dimensional modeling of paleontological samples using combination of synchrotron-based fine CT and 3D printings techniques*

1603 - Jérémie Gaillot, Maïté Adam & Noomane Keskes: *Virtual 3D biostratigraphy: Applications from micro-CT scan data*

1604 - Romain Garrouste & André Nel: *Deep insight into natural history specimens: The 3D Lab of the ISYEB Institute (MNHN/Sorbonne Universités)*

1605 - Laureano Gonzalez Ruiz, Camille Grohe, Ross MacPhee & Maria Dozo: *First digital cranial endocast of the “horned armadillo” Peltephilus (Mammalia: Xenarthra): Neuroanatomy and morphology of the caudal cranium*

1606 - Isabelle Kruta, Florent Goussard, Delphine Desmares, Patricia Wils, Isabelle Rouget, Marta Bellato, Jorge Cubo, Francois Baudin, Loïc Villier, Alexandre Lethiers & Laurent Riquier: *ATLAS 3D: a bridge project between research and teaching in palaeontology*

1607 - John Marshall, Olga Tel'nova & Alexandr Kulkov: *Understanding the systematic relationships of Devonian spores from integrated studies using light microscopy, SEM, TEM ultrastructure and nanotomography*

1608 - Óscar Sanisidro, María Ríos Ibáñez, Israel M. Sánchez, Enrique Cantero Hernández, Adrián de la Iglesia Fernández & Jorge Morales: *Digital cranial reconstruction and intraspecific appendage variability in Decennatherium rex (Ruminantia, Pecora)*

1609 - Jiani Sheng, Jonathan Aitchison & Sarah Kachovich: *Novel observations on the economic significance of radiolarians*

1610 - Jiani Sheng, Jonathan Aitchison & Sarah Kachovich: *μ-CT investigation of well-preserved Middle Cambrian radiolarians*

S17 Fossils and Recent, molecules and morphology: dialogs in phylogenetics

1701 - Patrick Auguste, Caroline Tokarski, Christian Rolando & Fabrice Bray: *Application of proteomic techniques to the identification of quaternary mammalian bones from prehistoric sites*

1702 - Rémi Lefebvre, Lionel Hautier, Frédéric Delsuc & Guillaume Billet: *Investigating the phylogenetic relationships of extinct taxa among close extant relatives: an integrative case study within the long-nosed armadillo species complex (genus Dasypus)*

S18 Functional morphology of the cranium in vertebrates

1801 - Hori Tomohiko: A re-examination of identification of small carnivore fossils using brain endocasts

S19 How to build a palaeontological collection?: expeditions, excavations, exchanges

1901 - Marie-Béatrice Forel: *When micropalaeontology meets history: natural history collecting by the French Navy in Indochina*

1902 - Nonhlanhla Vilakazi, Lazarus Kgasi, Dominique Gommery, Frank Sénagás, James Brink, Francis Thackeray & Brian Kuhn: *Bolt's Farm Cave System (Cradle of Humankind-South Africa) from 1936 to 2018*

1903 - Lindsay Walker, Austin Hendy, Erica Krimmel & Jann Vendetti: *Digitizing the Fossil Insects of Los Angeles for an international research community*

1904 - Luiz Weinschütz, Lucas Gritten, Drielli Peyerl & João Ricetti: *The paleontological advance and the search for mineral coal in the south of Brazil during the XIXth century and beginning of the XXth century.*

1905 - Linda Wickström: *The fossil collections at the Geological Survey of Sweden, a part of the Swedish moveable geoheritage.*

S22 Life in Palaeozoic seas and oceans

2201 - Carlton Brett, James Thomka & Donald Bissett: *Improving Echinoderm biodiversity estimates and interpretations of paleoecology through analysis of disarticulated columnals: A Silurian example.*

2202 - Gloria Daners, Cecilia Amenábar, Norberto Uriz & Alejandra Rojas: *Early Devonian organic-walled microfossils from outcrop samples of the Cordobés Formation, Durazno Group, Norte Basin, Uruguay*

2203 - Ru Fan, Shenghui Deng, Yuanzheng Lu, Shibei Zhang, Xin Li & Xueying Ma: *Conodonts from the boundary interval of the Sandaogou and Pingliang formations (Middle and Upper Ordovician) in Pingliang, Gansu Province, China*

2204 - Annalisa Ferretti, Hans Peter Schönlaub, Rossana Todesco & Carlo Corradini: *Conodont fauna and biostratigraphy of the Valentin Törl Section, Carnic Alps, Austria*

2205 - David Kroeck, Claude Monnet, Gary Mullins, Axelle Zacaï & Thomas Servais: *Global scale diversity of phytoplankton in the Palaeozoic: progress report*

2206 - Wei Lin: *Late Mississippian (Carboniferous) rugose corals from the Jianshanzi Section, Inner Mongolia*

2207 - Deusana Machado: *Cleidophoridae new family (Nuculoida, Bivalvia): systematics, paleogeography and paleoenvironment*

2208 - Deusana Machado & João Marcelo Rezende: *Orthotetida Waagen, 1884 (Brachiopoda) in The Devonian of Brazil*

2209 - Elise Nardin: *Turnover between crinoids and blastozoans in a Devonian mudmound setting of Morocco*

2210 - Yuping Qi, Tamara Nemyrovska, Qiulai Wang, Keyi Hu & Xiangdong Wang: *Conodonts of the genus Lochriea near the Visean–Serpukhovian boundary (Mississippian) at the Naqing section, Guizhou Province, South China*

2211 - Jacky Rousselle & Mustapha Meftah: *An attempt for finding the root causes of climate cooling tendency through Ordovician until glaciations and influence of rise of atmospheric oxygen.*

2212 - Carolina Zabini, Débora Tanji, Dermeval Do Carmo & Mário Assine: *Occurrence of two Lingulida genera (Brachiopoda) at the Late Ordovician-Early Silurian interval of the Paraná Basin northern border, Brazil.*

2213 - Shucan Zheng, Thomas Servais, Borja Cascales-Miñana & Qinqilai Feng: *The palynological studies from the Cambrian of China: an overview*

S23 Life in the time of Pangaea: volcanism, warming, anoxia, acidification and extinction

2301 - Bethany Allen: *Tetrapod spatial biodiversity patterns across the end-Permian mass extinction and recovery interval*

2302 - Eliana Coturel, Josefina Bodnar & Eduardo Morel: *New insights in the Lower to Middle Triassic floras of Argentina (Southwestern Gondwana)*

2303 - Hana Jurikova, Marcus Gutjahr, Klaus Wallmann, Sascha Flögel, Volker Liebetrau, Renato Posenato, Lucia Angiolini, Claudio Garbelli, Uwe Brand & Anton Eisenhauer: *Carbon cycle perturbations and ocean acidification at the onset of the end-Permian mass extinction*

2304 - Wolfgang Kiessling, Carl Reddin, Martin Aberhan, Kenneth De Baets, Jana Gliwa, Ádám Kocsis, Veronica Piazza, Patrícia Rita, Yadong Sun & Hans-O. Portner: *Research group poster: Temperature-Related Stresses as a Unifying Principle in Ancient Extinctions (TERSANE)*

2305 - Carl Reddin, Ádám Kocsis & Wolfgang Kiessling: *Marine invertebrate responses to temperature-related stressors and their interactions*

2306 - Rachel Warnock, Walker Pett, Alexander Dunhill, Alexandra Gavryushkina, Tracy Heath & Tanja Stadler: *A phylogenetic and stratigraphic approach to analysing diversification dynamics in deep time*

2307 - Everton Wilner & Ana Scomazzon: *Anoxia events and conodonts occurrence, in Campáleo outcrop, Itararé group, Lontras shale, Cisuralian of the Paraná Basin, Brazil*

2308 - Karolina Zarzyczny, Jed Atkinson, Crispin Little & Alexander Dunhill: *Reconstructing trophic networks across the early Toarcian Ocean Anoxic Event (Lower Jurassic)*

S24 Macroecology and the Fossil Record

2401 - Iris Menéndez, Ana Gómez Cano, María Ángeles Álvarez Sierra & Manuel Hernández Fernández: *Biomic specialization and the influence on diversification rates of squirrels (Sciuridae, Mammalia) during the Cenozoic*

2402 - Amane Tajika & Christian Klug: *The old and the new plankton: ecological replacement of associations of cephalopod plankton by holoplanktonic gastropods after the Cretaceous?*

S25 Mesozoic Paleontology and Paleoenvironments of Indochina

2501 - Yuong-Nam Lee, Hang-Jae Lee, Sang-Young Han, Euijun Park & Chan Hee Lee: *A new Early Cretaceous megatrack site in Korea*

S26 Microorganism evolution and interaction with biogeochemical cycles and climate

2601 - Claudia Baumgartner-Mora, Goran Andjic & Peter Oliver Baumgartner: *Global paleoclimatic vs. local endogenic impact on short-lived Lager Benthic Foraminifer-rhodoid photozoan carbonates in Central America and the Caribbean*

2602 - Ahmed Belhadji, Annachiara Bartolini, Lahcene Belkebir & Jean-Paul Saint Martin: *Planktic foraminiferal test morphological abnormalities from pre-evaporitic Messinian sediments (Chelif Basin, Algeria)*

2603 - Tsuyoshi Ito, Atsushi Matsuoka & Qinglai Feng: *Dimorphism of the Permian Albaillellaria (Radiolaria): Morphologic characters and lineage*

2604 - Martin Ronald & Thomas Servais: *Tectonic forcing of phytoplankton evolution, marine biodiversification, and biogeochemical cycles*

S27 Neogene continental environments in Africa and Eurasia

2701 - Teodor Obadă: *Note on the palaeoecology of the genus Deinotherium*

2702 - Laura Bento Da Costa, Brigitte Senut, Loïc Segalen & Martin Pickford: *Diversity of Miocene rodents and palaeoenvironmental reconstructions in Eastern and Southern Africa.*

2703 - Cécile Blondel, Gildas Merceron, Jérôme Surault & Jean-Renaud Boisserie: *Combination of dental microwear texture analyses with stable carbon isotopes in Bovidae from the Shungura Formation, Lower Omo Valley, Ethiopia: implications for environmental reconstruction during the Plio-Pleistocene.*

2704 - Richard Pokorný & Jana Pongrácová: *Plant-animal interactions from the perspective of ichnology: case study of Jesuitengraben (Oligocene, Czech Republic)*

2705 - Georgia Svorligkou, Ioannis Giaourtsakis, Panagiotis Kampouridis, Nikos Kargopoulos, Socrates Roussiakis & George Theodorou: *New morphological and biometrical data on the carpal and metacarpal bones of Dihoplus pikermiensis and "Diceros" neumayri (Perissodactyla, Rhinocerotidae) from the Late Miocene of Greece*

2706 - Samir Zouhri, Denis Geraads & Siham El Boughabi: *Late Miocene Vertebrates from Tizi N'Tadderht near Skoura, Ouarzazate Basin, Morocco*

S28 New trends in stratigraphy - Stratigraphic section (SGF) session

2801 - Yang Shen: *Visean (Carboniferous) foraminiferal biostratigraphic succession of South China*

2802 - Salomé Ducos, Linda Rossignol, Frédérique Eynaud, Sébastien Zaragosi, Thibaut Caley, Bruno Malaizé, Nadine Ellouz-Zimmermann, Thierry Garlan & Marie-Hélène Castera: *Successive appearances of Globorotalia truncatulinoides (Foraminifera) as a biostratigraphic tool in Northwestern Arabian Sea (last 100 000 years)*

2803 - Nathalie Fagel, Jemaa Amakrane, Ali Azdimousa, Kamal El Hammouti, Halima Rezqi & Meriam El Ouahabi: *Neogene paleoenvironmental evolution of Guercif basin (Morocco): implications for the evolution of the South Rifian Corridor*

2804 - Khatuna Mikadze, Mzeqala Onophrishvili, Nana Ikoshvili & Anna Menabde: *Biostratigraphy and Paleoenvironment of the upper Cretaceous sediments of the Gagra-Java zone and Okriba-Khreitian subzone (Georgia) on the basis planktonic foraminifers*

2805 - Linda Rossignol, Salomé Ducos, Cassandre Aimon & Frédérique Eynaud: *Coiling ratio of Globorotalia truncatulinoides: a robust stratigraphic tool in the North East-Atlantic during the Holocene*

2806 -Nicolas Barbarin, Frédéric Ricciardi, Jérémie Gaillot & Luc Beaufort: *SYRACO, an automated recognition system of nannofossils applied to biostratigraphy: advantages and limitations*

S29 Palaeobiodiversity of Southeast Asia

2901 - Wei Chen & Beibei Li: *Mid-Holocene Pollen records of vegetation and climate change from the peat profile in Lake Chenyaoahu, the plain of the lower reaches of Yangtze River*

2902 - Arnaud Filoux, Gaël Becam & Athiwat Wattanapituksakul: *A late Pleistocene Hominin from Tham Prakai Phet (Chaiyaphum Province, Thailand): preliminary analysis of an isolated upper premolar*

2903 - Hao Huang, Xiaochi Jin & Yukun Shi: *Middle Permian fusulinid Rugososchwagerina (Xiaoxinzhaiella) from the Shan Plateau, Myanmar: systematics and paleogeography*

2904 - Adun Samathi: *Phylogenetic Position of an Ornithomimosaur Kinnareemimus khonkaenensis from the Early Cretaceous of Thailand*

2905 - Adun Samathi & Wijanee Sendang: *The reconstruction of the theropod dinosaur Siamotyrannus isanensis from the Early Cretaceous of Thailand*

2906 - Yusuke Takebe, Harufumi Nishida & Toshihiro Yamada: *A permineralized fertile segment of leptosporangiate fern Dennstaedtia (Dennstaedtiaceae) from the Late Cretaceous (Coniacian) of Hokkaido, Japan*

S30 Palaeontology and geological heritage

3001 - Julien Denayer, Annick Anceau & Cyrille Prestianni: *Two centuries of palaeontological research in the University of Liège, Belgium*

3002 - Grégoire Egoroff, Patrick De Wever, Annie Cornée & Claire de Kermadec: *The national geoheritage inventory in France, from knowledge to outreach*

3003 - Marcela Gomez-Perez, Sandra Hernandez Hernandez, Laura Ortiz Blanco & Leslie Noè: *Urban Palaeontology: A key tool for the protection and conservation of the Geoheritage in the Alto Ricaurte Province*

3004 - Marcela Gomez-Perez, Estefania Salgado-Jauregui & Marianela Vargas-Anaya: *Colombian geological and paleontological heritage geoconservation*

3005 - Myette Guiomar, Didier Bert, Violaine Bousquet, Patrick Mathieu & Pierfranco Brizio: *The paleontological heritage at the heart of the European cross border interreg V-A France-Italy Alcotra: the geological @dventure*

3006 - Eustoquio Molina: *Main marine outcrops of interest for the paleontological heritage in the Iberian Peninsula and the Balearic Islands*

3007 - Luis Troya, Gerard Lucena, Raquel Robles-Salcedo, Ángeles Zamora & Vicent Vicedo: *Rudists from the Moulin de la Roque section and other Santonian outcrops of the La Cadière-d'Azur Formation (Le Beausset basin, SE France) housed in the MCNB palaeontological collections*

3008 - Vicent Vicedo, Raquel Robles-Salcedo, Luis Troya & Gerard Lucena: *The micropalaeontological collections of the Museu de Ciències Naturals de Barcelona (MCNB): a tool for learning from the past*

3009 - Eliane Vila Lobos Strapasson, Letícia Nitsche & Luiz Weinschütz: *Paleontological heritage and tourism: interpretation of patrimony in Brazilian museums of natural history*

S31 Paleobiodiversity and evolutionary history of vertebrates in Africa

3101 - Tannina Alloul, Rachid Hamdidouche, Olga Otero, Jean Claude Rage & Nour-Eddine Jalil: *Discoveries in the Cretaceous Kem-Kem plateau (SW Algeria): sedimentology and paleontology*

3102 - Eva-Maria Bendel, Christian Kammerer & Jörg Fröbisch: *Postcranial anatomy of the gorgonopsian Gorgonops torvus from the Late Permian of South Africa*

3103 - Julien Benoit, Rodolphe Tabuce, Theodor Obada, Vladislav Maraescu & Paul Manger: *The evolution of endocranial size in Proboscidea*

3104 - Anusuya Chinsamy-Turan, Herbert Klinger, Christen Shelton, German Montoya-Sanhueza, Emil Krupandan, Iyra Maharaj & Ryan Tucker: *Rare dinosaur, mosasaur, turtle and other vertebrate remains from marine Cretaceous deposits of South Africa*

3105 - Guillaume Daver, Gilles Berillon, Caroline Caroline Jacquier, Yann Ardagna, Meklit Yadeta, Tiphaine Maurin, Antoine Souron, Cecile Blondel, Yves Coppens & Jean-Renaud Boisserie: *New hominin postcranial remains from the Shungura Formation, Lower Omo Valley (Ethiopia)*

3106 - Naoto Handa, Masato Nakatsukasa, Yutaka Kanimatsu & Hideo Nakaya: *Late Miocene rhinocerotid assemblage from Samburu Hills and Nakali in Kenya*

3107 - Safiyyah Iqbal, Kristian Carlson, Fernando Abdala, Jonah Choiniere & Frank Kienhofer: *A finite element analysis for the limb loadings in Thrinaxodon liorhinus (Therapsida, Cynodontia): postural validation of non-mammaliaform cynodonts*

3108 - Rebecca Lakin: *Juvenile Spinosaurus (Theropoda: Spinosauridae) from the Middle Cretaceous of Morocco and their Ecological Implications*

3109 - Rohan Mansuit, Chloé Olivier & Nour-Eddine Jalil: *New species of Lystrosaurus (Lystrosauridae, Dicynodontia) from South Africa, implications for our knowledge of the phylogenetic relationship of the genus and the post Permo-Triassic biotic crisis recovery*

3110 - Spencer Mattingly, K. Christopher Beard, Pauline Coster, Mustafa Salem, Jean-Jacques Jaeger & Yaowalak Chaimanee: *The first parapithecine (Primates: Anthropeidea) outside of Egypt: a new species of Simonsius from the early Oligocene of Libya*

3111 - Olga Otero: *The rise of the modern African fish fauna as a consequence of great environmental changes during the last 120Ma*

S32 Paleobiogeography

3201 - Kazutaka Amano, Crispin Little & Kathleen Campbell: *Lucinid bivalve fossils from Miocene hydrocarbon seep sites in the Hawke Bay area of North Island, New Zealand, with remarks on the Miocene hydrocarbon-seep fauna in New Zealand*

3202 - Jair Israel Barrientos-Lara & Jesus Alvarado-Ortega: *The Jurassic marine reptiles of Mexico*

3203 - Saverio Bartolini Lucenti & Lorenzo Rook: *Plio-Pleistocene diversity of the tribe Galictini (Mammalia, Carnivora, Mustelidae) across Eurasia. The state of art*

3204 - Aoran Liu, Qinglai Feng & Lifu Tian: *Taxology and biogeography of Longfengshan Biota*

3205 - Akihiko Suzuki, Shigeo Hayashi & Takafumi Enya: *Paleobiogeographic significance of the Janthinid snails on the Japanese Islands based on fossil and modern records*

3206 - Carolina Zabini, Dermeval Do Carmo, Livia Rodrigues, Dailto Silva & Mário Assine: *Report of possible ?Phyllograptus at the Ordovician/Silurian strata of the Paraná Basin Northern border, Brazil*

S33 Shell beds through time: implications for paleoecology, taphonomy and evolution

3301 - Luka Gale, Camille Peybernes, Tim Sotelšek, Nik Gračanin, Bogomir Celarc, Manca Hočevár & Rossana Martini: *Upper Triassic (lower Carnian) terebellid build-ups from Slovenia*

3302 - Andrey Ivantsov: *Precambrian shell beds consisting of body fragments of Ediacaran macroorganisms*

3303 - Teodor Obadă: *The first finds of Tridacninae in the Middle Miocene of Eastern Europe*

3304 - Adam Tomasovych & Susan Kidwell: *Time averaging of molluscan assemblages in shell beds: effects of temporally-variable production and mixing*

S34 aucun poster

S35 The conservation of paleontological collections: challenge and perspectives

3501 - Giliane Odin, Véronique Rouchon, Olivier Béthoux & Dong Ren: *How gypsum growth induced by pyrite oxidation jeopardizes the conservation of fossil specimens: an example from the Xiaheyan entomofauna (Late Carboniferous, China)*

3502 - Kari Prassack: *A horse with a side of radon and a thousand fragments of turtle shell*

3503 - Tetsuya Sato: *How to Make a Fossil Preparation Lab: the Case of the Xingyi National Geopark Museum in China*

S36 The Devonian: life, environments and time

3601 - Ninon Allaire, Claude Monnet & Catherine Crônier: *The early diversification of the Ammonoidea: taxonomic richness of the Devonian faunas from Morocco*

3602 - Rainer Brocke, Walter Riegel, Nils Lünsdorf & Volker Wilde: *Exceptional preservation of spores from the Lower Devonian Hunsrück Shale, Rheinisches Schiefergebirge, Germany*

3603 - Eliana Coturel & Jonatan Arnol: *Plant remains from the Devonian of San Juan, Argentina*

3604 - Catherine Crônier, Abdelkader Abbache, Ahmed Khaldi, Morgane Oudot, Sébastien Maillet & Abdelkader Ouali Mehadji: *Biodiversity and palaeobiogeographical affinities of Middle Devonian trilobites from Algeria*

3605 - Irina Evdokimova: *Early Devonian ostracods of the Russian Arctic Region*

3606 - Renato Ghilardi, Sabrina Rodrigues, Victor Ribeiro, Felipe Sousa & Fábio Carbonaro: *A case of preservational bias on Devonian chitin-phosphatic fossils from Brazil*

3607 - Catherine Girard, Jean-Jacques Cornée, Michael Joachimski, Anne-Lise Charruault, Anne-Béatrice Dufour & Sabrina Renaud: *Paleogeographic differences in temperature, water-depth and conodont biofacies during the Late Devonian*

3608 - Sven Hartenfels & Felix Lüddecke: *Preliminary Famennian data of the “Ravin de la Fontaine de Santé” section (Montagne Noire, southern France)*

3609 - Sven Hartenfels, Sandra Kaiser, Michael Joachimski, Catherine Girard & Tomas Kumpan: *Environmental changes during Famennian low-order biocrises - stable isotope data from European successions*

3610 - Edgars Klievēns & Sandijs Meškis: *Influence of dolomitization on the trace fossil assemblages from the Pļaviņas RS deposits, Devonian, Latvia*

3611 - Edgars Klievēns & Sandijs Meškis: *Sedimentary environment of carbonate rocks and fossil assemblages from the Pļaviņas Formation, central part of the Baltic Devonian basin: comparison of the Riežupe outcrop and Randāti Cliff*

3612 - Tomáš Kumpan, Jiří Kalvoda, Zoya Tolokonnikova & Marcela Holá: *New data on latest Famennian microbialites and early Tournaisian bryozoans of the Moravian Karst Palaeozoic (Czech Republic)*

3613 - Tomáš Kumpan, Sandra Kaiser, Michael Joachimski & Michael Rasser: *Conodont biostratigraphy and geochemistry of pelagic Devonian-Carboniferous boundary successions at Trolp (Graz Paleozoic) and Grüne Schneid (Carnic Alps)*

3614 - Jau-Chyn Liao, Gonçalo Silvério, Jose Ignacio Valenzuela Rios, Gil Machado, Noel Moreira & Pedro Barreto: *Hunting for Eifelian (Middle Devonian) conodonts in the Pedreira da Engenharia Formation (Ossa-Morena Zone, Portugal)*

3615 - Jau-Chyn Liao, Jose Ignacio Valenzuela Rios, Carlos Martínez-Pérez & Peter Carls: *Givetian (Middle Devonian) Conodonts from the Iberian Chains (Spain)*

3616 - Ervins Lukševičs & Ģirts Stinkulis: *Signatures of tidal processes and the Middle-Late Devonian vertebrate assemblages from the epeiric Baltic paleobasin*

3617 - Cameron Penn-Clarke: *Palaeoenvironments and relative sea-level shifts during the Devonian of South Africa*

3618 - Vahram Serobyan, Catherine Crônier, Bernard Mottequin, Araik Grigoryan & Taniel Danelian: *Upper Devonian-Lower Carboniferous brachiopods: contribution to the stratigraphy of Armenia*

3619 - Anne-Christine da Silva, Alex Bartholomew, Carlton Brett, Frits Hilgen, Charles Ver Straeten & Mark Dekkers: *Exceptional Lower Devonian Milankovitch cycles recording from the Hudson Valley and corresponding magnetic susceptibility record, New York State (USA)*

3620 - Sören Stichling & Ralph Becker: *Initial reef growth in the Hönne Valley (Hagen-Balve Reef complex, Rhenish Massif)*

3621 - Meiqiong Zhang & Xueping Ma: *Revised classification and diversification of Devonian ambocoelioid brachiopods in South China*

S37 The onset of the Great Ordovician Biodiversification (GOBE): fossils, radiations and Lagerstätten - IGCP 653

3701 - Bertrand Lefebvre, Rudy Lerosey Aubril, Emmanuel Martin, Juan Carlos Gutiérrez-Marco, Diego García-Bellido, Isabel Rabano, Farid Saleh, Muriel Vidal & Peter Van Roy: *Fossilized appendages and guts in three phacopid trilobites from the Tremadocian lower Fezouata Konservat-Lagerstätte (Lower Ordovician, Morocco)*

S38 no poster

S39 Timetrees

3901 - Holly Betts, James Clark, Tom Williams, Philip Donoghue & Davide Pisani: *Gene origins that predate the last universal common ancestor*

S40 Vertebrate paleophysiology

4001 - Mathieu Faure-Brac & Jorge Cubo: *The origin of Mammalian endothermy: a phylogenetic approach*

4002 - Manon Hullot, Manuel Ballatore, Gildas Merceron & Pierre-Olivier Antoine: *A reference database of enamel texture microwear in extant rhinoceroses and its relevance for diet reconstruction of the fossil rhinocerotid Stephanorhinus (Mammalia, Perissodactyla)*

4003 - Benjamin Jentgen-Ceschino, Koen Stein & Valentin Fischer: *Cases of pathological bone growth in Isanosaurus and Spinophorosaurus (Sauropoda)*

4004 - Lorenzo Lustri & Andrew Heckert: *Ecological and Phylogenetic models to estimate Resting and Standard Metabolic Rates of extinct ectothermic Archosauria (Pseudosuchia: Aetosauria)*

4005 - Irene Montañez Rivera, John Nyakatura & Eli Amson: *Another convergence: bone cortical compactness in extant sloths*

S41 XX1st Century paleohistology of mineralized tissue

4101 - Oskar Bremer & Henning Blom: *Three-dimensional virtual histology of the osteostracan Dartmouthia revealed by synchrotron radiation microtomography*

4102 - Floortje Mossou, Ivan Sansom, Philip Donoghue & Martin Rücklin: *Cells in another dimension – characterizing putative early jawed vertebrate dentine cell spaces in 3D*

4103 - Carmen Nacarino-Meneses, Guillem Orlandi-Oliveras & Meike Köhler: *Dental growth of Middle and Late Pleistocene equids from Germany: first insights from enamel histology*

4104 - Jasper Ponstein, Jordi Estefa, Vincent Fernandez, Sifra Bijl, Anusuya Chinsamy, Paul Tafforeau, Jozef Klembara & Sophie Sanchez: *Can we infer the posture of fossil taxa based on the 3D pattern of their long-bone epiphyseal vascularisation?*

S42 "Early" vertebrates: from fossils to genomes

4201 - Giorgio Carnevale, Giuseppe Marramà, Alexandre Bannikov & Jürgen Kriwet: *The youngest marine record of double-armoured herrings: an Eocene paraclupeid fish (Teleostei, Clupeomorpha, Ellimmichthyiformes) from Monte Bolca*

4202 - Robert Carr, David Chapman, David Saja & Otyllia Abraham: *Preliminary analysis of the morphology and ultrastructure of a putative arthroderan (Placodermi) egg case*

4203 - Rosie Dhanda, Duncan Murdock, John Repetski, Philip Donoghue & M Paul Smith: *The apparatus composition and architecture of Erismodus quadridactylus and its implications for the prioniodinin apparatus bauplan*

4204 - Ilja Kogan, Jan Fischer, Nadine Janetschke, Evgeny Popov & Stefan Reiss: *"Early" vertebrates from the Late Cretaceous of Saxony – the fish inventory revisited*

4205 - Jing Lu, Yu-zhi Hu, Gavin Young & Carole Burrow: *New discoveries from an Early Devonian placoderm illuminate the evolutionary origin of teeth*

4206 - Emma Randle & Robert Sansom: *A phylogeny for Heterostraci: evolutionary relationships of extinct jawless vertebrates on the gnathostome stem*

4207 - Moya Meredith Smith: *Old questions answered for the enigmatic Palaeospondylus: new data demonstrates crown-group vertebrate character*

S43 Open Session

The posters of the open session are gathered into thematic groups.

Ecology and Evolution

4301 - Muhammad Aqqid Saporin, Toshifumi Komatsu, Mark Williams, Jan Zalasiewicz, Hung Dinh Doan & Adrian Rushton: *The Silurian Graptolites of the Co To Islands, Northeast Vietnam*

4302 - Sofia Benamri, Khadija Aboumaria, Zohra Bejjaji, Mohamed Najib Zaghouel & Fatima El Hmidi: *The benthic foraminifera, bio-indicators of paleoenvironments and extreme events during the Quaternary of Rabat-Temara (Moroccan Atlantic Coast)*

4303 - Fernanda Cabrera, Sergio Martinez & Martin Ubilla: *New radiocarbon AMS ages on mollusks from the Sopas Formation (Pleistocene, Uruguay) and a new continental Holocene record for Uruguay*

4304 - Guillaume Cousin, Mónica Solórzano Kraemer & Olivier Bethoux: *A rare Osmylidae species (Insecta, Neuroptera) in Baltic amber displaying a critical character state for understanding hind wing evolution in the family*

4305 - Isabelle Deregnacourt, Jérémie Bardin, Torsten Wappler, John Anderson & Olivier Béthoux: *The Molteno Formation (South Africa), a testimony of the diversity of Odonata (Insecta) during the Triassic*

4306 - Marine Fau, Loïc Villier & Timothy Ewin: *Comparative anatomy and systematics of forcipulatatean sea stars: new insights from three “forgotten” Jurassic species*

4307 - Sonia Ros Franch & Javier Echevarría: *Permian-Triassic character evolution in the Trigoniida (Mollusca-Bivalvia): dissecting the 'Myophoriidae-Trigoniidae' transition*

4308 - Carolin Haug: *Raptorial appendages of fossil and extant euarthropods: a prime example of convergent evolution*

4309 - Joachim Haug: *Super-size me – the fossil record of giant larval forms of arthropods*

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