



# 3<sup>rd</sup> Paleolimnology & Limnogeology International Symposium

TUESDAY 7<sup>TH</sup> 6-10<sup>th</sup> October 2025 - Aix les Bains (France)



## ROOM BOURGET

Time start - end	Session name	Speaker	Title	
08:30 - 08:45	<b>I-2-Bridging Traditional and Cutting-Edge Techniques in Paleoclimate and Paleoenvironmental Reconstruction</b>	Tyler Jonathan	<ul style="list-style-type: none"><li>Centennial scale variability in the East Asian Monsoon during the last glacial period: a new oxygen isotope record from Lake Suigetsu, Japan</li><li>Evolution of diagenetic minerals in Nam Co, a high-altitude Tibetan lake</li><li>Paleo-hydrological reconstructions from gypsum hydration water in playa-lakes sediments: two case studies in the southern Iberian Peninsula</li><li>Environmental magnetism to reconstruct fire severity around the Crau plain (southeastern France) during the Holocene</li><li>Leveraging paleoenvironmental reconstruction: An AI-based approach in proxy development</li><li>Fundamental understanding of phosphate-oxygen isotope composition in lake paleorecords</li></ul>	
08:45 - 09:00		Laakkonen Aliisa		
09:00 - 09:15		Gázquez-Sánchez Fernando		
09:15 - 09:30		Latapy Cécile		
09:30 - 09:45		Subba Rohan		
09:45 - 10:00		Bengt Christopher		
10:00 - 10:30	ECR AWARD TALKS (2)			
10:30 - 10:45	COFFEE BREAK			
10:45 - 11:00	<b>I-3-Method developments and applications of micrometer-scale geochemical imaging techniques on lake sediments</b>	Żarczyński Maurycy	<ul style="list-style-type: none"><li>Lake productivity and mixing regime changes in Lake Gorzyńskie during the last 13,250 years: a new hyperspectral record from Western Poland</li><li>Computed Tomography can reveal annual sedimentation rates in Lake Guynemere, Kerguelen Island</li><li>Geo_DECT: a new tool to visualize dual-energy CT data and study lacustrine sediments</li><li>Fine particles investigation in lake sediments through a broadened Convolutional neural network training set with expanded Hyperspectral data</li></ul>	
11:00 - 11:15		Cederstrøm Jan Magne		
11:15 - 11:30		Martini Margherita		
11:30 - 11:45		Kury Milena		
11:45 - 12:00	<b>I-4-Organic geochemistry in lakes: recent methodological developments and ...</b>	Bunin Elizabeth	<ul style="list-style-type: none"><li>Can fecal lipid biomarker records be used to identify periods of population pressure in Paleolithic societies? A case study from Late Pleistocene Paleolake Hula (northern Israel)</li><li>Evaluating lacustrine faecal steroid biomarkers as semi-quantitative proxies of reindeer and human population change in northern Finland</li><li>Sedimentary pigments reveal complex ecosystem responses of primary producers to mid-Holocene anoxia in a small low-Arctic Greenland lake</li></ul>	
12:00 - 12:15		Mackay Helen		
12:15 - 12:30		Tuccillo Mia		
12:30 - 13:30		LUNCH BREAK		
13:30 - 13:45	<b>I-4-Organic geochemistry in lakes: recent methodological developments and applications in lacustrine environments</b>	De Jonge Cindy	<ul style="list-style-type: none"><li>Holocene environmental change in Rotsee and its impact on sedimentary carbon storage</li><li>Holocene plant wax n alkane record from Lake Peixão (Portugal): Key findings and climate implications</li><li>Evaluation of 3-OH FAs and brGDGTs as palaeoclimate proxies in lakes of the French Alps and southern Chile</li><li>Multi-proxy assessment of seasonal bias in temperature sensitive biomarker reconstructions across the Holocene</li><li>Overcoming pitfalls and challenges in oxygen isotope analysis of chironomid larval head capsules</li><li>Sub-centennial scale hydroclimate change in northern Svalbard during the deglacial and Early Holocene from hydrogen isotopes of sedimentary plant waxes and algal lipids</li><li>Hydroclimatic variability over the Last Millennium Revealed by <math>\Delta D_{wax}</math> and <math>\Delta^{13}C_{wax}</math> in two Northwestern Iberian lakes</li><li>Integrating analyses of different plant sedaDNA fractions to enhance ecological and environmental insights</li></ul>	
13:45 - 14:00		Hernandez Armand		
14:00 - 14:15		Ke Sai		
14:15 - 14:30		Abrook Ashley		
14:30 - 14:45		Mayr Christoph		
14:45 - 15:00		Van Der Bilt Willem G.m.		
15:00 - 15:15		Fernández Pérez María Eugenia		
15:15 - 15:30		Giguet-Covex Charline		
15:30 - 16:00	COFFEE BREAK			
16:00 - 16:15	<b>IV-2-How can modeling approaches help us to understand past, present and future lakes ?</b>	Desgué Olivia	<ul style="list-style-type: none"><li>Integrating paleolimnology and modelling to reconstruct long-term hypoxia and lake-use-driven ecosystem changes in perialpine lakes</li><li>Exploring multiscale lake processes through paleo-data and dynamic modeling: A Lake Geneva case study</li><li>Combining paleolimnology and ecosystem modelling approach to quantify human impacts on lake regime shift</li><li>Evaporative geochemical models: A simple tool for evaluating and reconstructing hydrologic budgets in modern and ancient lake systems</li><li>Understanding Hydrodynamics and Sediment Transport in Data-Sparse Lakes Using Numerical Modelling: Insights from Lakes Hulun, Buir and Turkana</li><li>A Derivative of the Köppen-Geiger classification tailored for Numerical Modeling of the Lacustrine Ecosystems</li></ul>	
16:15 - 16:30		Jenny Jean-Philippe		
16:30 - 16:45		Qin Bo		
16:45 - 17:00		Kibblewhite Tom		
17:00 - 17:15		Storms Joep		
17:15 - 17:30		Chauveau Benoit		
17:30 - 18:00	SYMPOSIUM GUEST TALK			
18:00 - 19:30	POSTER SESSION (I-4, II-2 AND IV-2) + REFRESHMENTS			

## ROOM ANNECY

Time start - end	Session name	Speaker	Title
08:30 - 08:40	<b>IV-4-Hydrothermal and groundwater influences on lacustrine sedimentation and paleoecology: A tribute to Michael Rosen</b>	Conveners	<ul style="list-style-type: none"><li>• Tribute to Michael Rosen</li><li>• Hydrothermal veins and organic-rich carbonate spring deposits in Lake Gosiute of the Eocene Green River Formation, Bridger Basin, Wyoming</li><li>• Groundwater flow rules fluid-microbe-mineral interactions in two Patagonian lacustrine basins</li><li>• The role of hot springs in sedimentation in the Kenya Rift lakes</li><li>• Tectonic and magmatic controls on hydrothermal and meteoric waters in the South Kenya Rift</li><li>• Hydrothermal influence on Pliocene rift-lakes in Afar, Ethiopia and Baringo, Kenya: Evidence from the Hominin Sites and Paleolakes Drilling Project (HSPDP) drill-cores</li><li>• Limnogeologic analysis of two Triassic rift lake basins in SW Gondwana</li></ul>
08:40 - 08:45		Shaikh Riman	
08:45 - 09:00		Ariztegui Daniel	
09:00 - 09:15		Renaud Robin	
09:15 - 09:30		Owen Richard	
09:30 - 09:45		Scott Jennifer	
09:45 - 10:00	<b>VIII-1-Tectonics, climate, ...</b>	Benavente Cecilia	
10:00 - 10:30	ECR AWARD TALKS (2)		
10:30 - 11:00	COFFEE BREAK		
11:00 - 11:15	<b>VIII-1-Tectonics, climate, ecology and geomorphology in rift lakes</b>	Domingos Luz Leandro	<ul style="list-style-type: none"><li>• Influence of the Indian Ocean Dipole and ENSO on Lake Tanganyika during the Common Era</li><li>• Historical patterns of sedimentation in Nsumbu National Park (Zambia), Lake Tanganyika</li><li>• Time averaging of shell beds in Lake Tanganyika as a climate recorder and anthropogenic indicator</li><li>• Hydrological connectivity of Kenya Rift Lakes as a driver of lake level fluctuations and biotic interchange during the African Humid Period</li><li>• Fluvio-lacustrine evolution of a rift axial system: example of the Lower Omo Valley (Turkana Depression, Ethiopia) over the past four million years</li><li>• Beyond the Drill Core: Assessing Interactions of Hydroclimate Variability and Extensional Processes Across the Lake Malawi (Nyasa) Rift, East Africa</li></ul>
11:15 - 11:30		Mcglue Michael	
11:30 - 11:45		Soreghan Michael	
11:45 - 12:00		Dommain René	
12:00 - 12:15		Poirier Perrine	
12:15 - 12:30		Scholz Christopher	
12:30 - 13:30	LUNCH BREAK		
13:30 - 13:45	<b>VIII-1-Tectonics, climate, ecology and geomorphology in rift lakes</b>	Qi Li	<ul style="list-style-type: none"><li>• Source-to-sink coupling and Characteristics of sedimentary differential response for multi-episode rifting cycles in lacustrine rift basin</li><li>• The stable oxygen and carbon isotope record from 'Ubeidiya in the Dead Sea transform: early Pleistocene lake level and climate changes in the region</li></ul>
13:45 - 14:00		Mischke Steffen	
14:00 - 14:15	<b>VIII-4-Lake Bourget and cousins: perialpine lakes as the cradles and future of limnogeology and paleolimnology</b>	Chapron Emmanuel	<ul style="list-style-type: none"><li>• Lake Bourget: one of our great P.A.L. (Peri Alpine Lake)</li><li>• From climate to human shaping of the Earth critical zone: a quarter-century of geochemical investigation of Lake Bourget Holocene sediment</li><li>• Intracellular Amorphous Calcium Carbonate Inclusions in Microorganisms from Lake Geneva: A Novel Biomineralization Process with Geochemical and Limnogeological Implications</li><li>• Lake Bourget in the OLA Lake Observatory Network: A context for developing integrated approaches across multiple timescales</li></ul>
14:15 - 14:30		Arnaud Fabien	
14:30 - 14:45		Ariztegui Daniel	
14:45 - 15:00		Jenny Jean-Philippe	
15:00 - 15:15	<b>VIII-2-Mountain lakes from extreme environments</b>	Cartier Rosine	<ul style="list-style-type: none"><li>• Ecosystem responses of a French Mediterranean mountain lake to climate change and soil dynamics since the last deglaciation as inferred from bioindicators and geochemical proxies</li><li>• Diatom biodiversity dynamics and their relationship with carbon burial in mountainous lakes of central China during the past 200 years</li></ul>
15:15 - 15:30		Peng Jia	
15:30 - 16:00	COFFEE BREAK		
16:00 - 16:15	<b>VIII-2-Mountain lakes from extreme environments</b>	Llodrà-Llabrés Joana	<ul style="list-style-type: none"><li>• Subfossil pigments in a high-altitude lake (Sierra Nevada, Spain): tracking algal changes over 400 years and the unprecedented era we may be facing</li><li>• Exploring Holocene climatic and environmental dynamics in a Sierra Nevada's (Southern Spain) alpine lake: a diatom perspective</li><li>• Chironomid Assemblages as Indicators of Recent Environmental Change in Swiss Mountain Lakes</li><li>• Disentangling the effects of earthquakes and climate change on a 250-year diatom paleo-limnological record from the Yala Mountain region, southeastern Tibetan Plateau</li><li>• Late Holocene flood and African dust deposition dynamics in the alpine critical zone of Greece: New insights from sedimentary records of the highest alpine lakes of Pindos Mountains</li><li>• Abrupt temperature shift on the central-eastern Tibetan Plateau triggered agriculture patterns ~3800 years ago</li></ul>
16:15 - 16:30		Llodrà-Llabrés Joana	
16:30 - 16:45		Damber Maja	
16:45 - 17:00		Rioual Patrick	
17:00 - 17:15		Styllas Michael	
17:15 - 17:30		Xiaohuan Hou	
17:30 - 18:00	SYMPOSIUM GUEST TALK		
18:00 - 19:30	POSTER SESSION (IV-4, VIII-1, VIII-4 AND VIII-2) + REFRESHMENTS		



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## ROOM LÉMAN

Time start - end	Session name	Speaker	Title
08:30 - 08:45	III-2-Using lake sediments to trace soil health and agricultural practices across watersheds	Kurek Josh	<ul style="list-style-type: none"><li>• Connections between watersheds, sediments, and fish to understand legacy DDT pollution</li><li>• Ten years of land degradation in Mayotte: Evidence from sediment cores and eDNA reveal rapid erosion and ecosystem shifts (2011-2022)</li><li>• Recent human-induced ecological changes in a «pristine» Neotropical karst lake of southern Mexico</li></ul>
08:45 - 09:00		Foucher Anthony	
09:00 - 09:15		Caballero Margarita	
09:15 - 09:30	III-3-Reconstructing the impact of human activities on the environment	Gastineau Renaldo	<ul style="list-style-type: none"><li>• Human-initiated autocyclic delta failures in Lake Brienz (Switzerland)</li><li>• Looking for early human impacts on the Canary Islands: the lacustrine record</li><li>• Human and climate impacts on the alpine Critical Zone over the past 10,000 years</li></ul>
09:30 - 09:45		Blas Valero Garces	
09:45 - 10:00		Rapuc William	
10:00 - 10:30	ECR AWARD TALKS	Marchegiano Marta Muiruri Veronica	<ul style="list-style-type: none"><li>• No Science Without Scientists: From Climate Reconstruction to Building a Sustainable IAL/IPA Community</li><li>• Quaternary diatoms and palaeoenvironments of the Kooraa Plain, southern Kenya rift</li></ul>
10:30 - 11:00	COFFEE BREAK		
11:00 - 11:15	III-3-Reconstructing the impact of human activities on the environment	Mazure Théo	<ul style="list-style-type: none"><li>• Quantifying soil erosion during the Holocene: contributions from the integration of modeling and lake sediment archives</li><li>• High-mountain pastoralism influences wild mammal habitats in the Late Holocene</li><li>• Climate and human drivers: Reconstructing aquatic productivity and anoxia over the past 11 kyr BP in two neighboring lakes (Swiss Plateau)</li><li>• Paleohydrological reconstructions from lake and wetland sediment archives of southwest Asia, investigating the links between climate changes, land use and water management strategies</li><li>• Human impact on terrestrial and aquatic ecosystems in the mid-Kama region, cis-Urals (Russia)</li><li>• Mid-to-late Holocene plant biodiversity and human influence within an Italian coastal wetland: insights from Lago di Burano pollen record (Tuscany)</li></ul>
11:15 - 11:30		Morlock Marina	
11:30 - 11:45		Schmidhauser Noé	
11:45 - 12:00		Brisset Elodie	
12:00 - 12:15		Shumilovskikh Lyudmila	
12:15 - 12:30		Ricucci Cristina	
12:30 - 13:30	LUNCH BREAK		
13:30 - 13:45	III-3-Reconstructing the impact of human activities on the environment	Rodríguez-Zorro Paula	<ul style="list-style-type: none"><li>• Late Holocene Paramo and Andean Forest dynamics inferred from Laguna Colorados, Colombia</li><li>• Climate and anthropization in Newfoundland: A multi-proxy reconstruction of landscape changes around L'Anse aux Meadows</li></ul>
13:45 - 14:00		Roulé Elia	
14:00 - 14:15	III-9-Pollen-based land cover reconstruction to study climate and human impact ...	Łuców Dominika	<ul style="list-style-type: none"><li>• Landscape topography and coastal proximity influenced wildfire in Central Newfoundland (Canada)</li><li>• Reconstruction of the regional dynamics of vegetation and human activities in the North-Western Alps over the last 7 millennia</li><li>• Late Holocene vegetation and climate change reconstructed from multi-proxy analysis of a mountain wetland in southern Taiwan</li></ul>
14:15 - 14:30		Julien Andréa	
14:30 - 14:45	III-3-Reconstructing the impact of human activities on the environment	Li Kuan-Hua	<ul style="list-style-type: none"><li>• Cultural eutrophication of Lake Gorzyńskie (western Poland) since prehistoric times – insights from a multi-proxy study of varved sediments</li><li>• How long is long-term? Comparing decadal- and centennial-scale insect diversity dynamics</li><li>• Effects of the Thirty Years' War on 17th-Century Central European aquatic and terrestrial ecosystems</li></ul>
14:45 - 15:00		Kołaczek Piotr	
15:00 - 15:15		Engels Stefan	
15:15 - 15:30		Schwalb Antje	
15:30 - 16:00	COFFEE BREAK		
16:00 - 16:15	III-3-Reconstructing the impact of human activities on the environment	Kaucha Karolina	<ul style="list-style-type: none"><li>• Impact of the Elbląg Canal construction on the ecosystem of selected lakes in Iława Lake District</li><li>• Disentangling the drivers of Insect Armageddon in the UK using sub-fossil chironomids.</li><li>• The ecological impacts and spatial footprint of mining activities on lakes from First Nations territories in Yukon, subarctic Canada</li><li>• A 50-year Record of Soil Erosion Dynamics: Pre- and Post-Wildfire Observations from Sediment Coring Methods in Contrasting Ecosystems (Var, Southern France)</li><li>• An Integrative Assessment of Changes in Nutrients and Aquatic Production in Large Reservoirs and Lakes in Western Canada</li><li>• Tracking Fish Habitat Changes Linked to Anthropogenic Stressors Using Chironomid and Chaoborus subfossils in Ontario Lakes</li></ul>
16:15 - 16:30		Watts Aspen	
16:30 - 16:45		Jones Evan	
16:45 - 17:00		Ducruet Romain	
17:00 - 17:15		Cumming Brian	
17:15 - 17:30		Lansing Dylan	
17:30 - 18:00	SYMPOSIUM GUEST TALK	Mangold Nicolas	<ul style="list-style-type: none"><li>• In-situ observations of deltaic sedimentary rocks by the Perseverance rover at Jezero crater, Mars</li></ul>
18:00 - 19:30	POSTER SESSION (III-2; III-3; III-4; III-9) + REFRESHMENTS		

## ROOM CÔME

Time start - end	Session name	Speaker	Title
08:30 - 08:40	III-1-Furthering the relationship between palaeolimnology and conservation	Tibby John	<ul style="list-style-type: none"><li>• The sensitivity of globally significant subtropical Australian dune lakes to past, present and future climate</li><li>• Filling the gaps: Reconstructing Waterbird Dynamics on Remote Lake Islands</li><li>• Cladocerans as paleoecotoxicological markers to assess mining activities on indigenous lands in northern Canada: Using paleolimnology to help with reconciliation</li><li>• Protected biotopes and glacial relicts from the past: preliminary palynological findings and time-based indicator species from the Teor-Campomolle palaeochannel sedge peatland (NE Italy)</li><li>• Informing freshwater management with the use of paleolimnology; Halifax Regional Municipality, Nova Scotia, Canada</li><li>• Cladocera Responses to Scale-Dependent Seabird Inputs to Island Ponds: (Colony) Size Matters</li></ul>
08:40 - 08:45		Álvarez-Manzaneda Inmaculada	
08:45 - 09:00		Would Jamie	
09:00 - 09:15		Braga Lorenzo	
09:15 - 09:30		Medeiros Andrew	
09:30 - 09:45		Kane Zoe	
09:45 - 10:00	ECR AWARD TALKS (2)		
10:00 - 10:30			
10:30 - 11:00	COFFEE BREAK		
11:00 - 11:15	III-5-Resilience and recovery in lake systems across time and space	Pham Jennifer	<ul style="list-style-type: none"><li>• Detecting critical transitions in lake states across Canada: a paleolimnological approach</li><li>• Does the alternative states theory stand the test of time for shallow lakes?</li><li>• Recent restoration of a large floodplain lake: evidence from sedimentary diatoms</li><li>• When resilience comes naturally: zoobenthos community turnover in a 1650-year record of climate-driven hydrological change</li><li>• Response of chironomid larvae in a freshwater lake to inundation from the 1929 Grand Banks Tsunami, Newfoundland, Canada</li><li>• Investigating recovery in nutrient-enriched shallow lakes using long-term monitoring and palaeoecological records</li></ul>
11:15 - 11:30		Sayer Carl	
11:30 - 11:45		Chen Xu	
11:45 - 12:00		Verschuren Dirk	
12:00 - 12:15		Pleskot Krzysztof	
12:15 - 12:30		Walton Richard	
12:30 - 13:30	LUNCH BREAK		
13:30 - 13:45	III-5-Resilience and recovery in lake systems across time and space	Schouten Stan	<ul style="list-style-type: none"><li>• Climate-Eutrophication-Anoxia Interactions in Late-Glacial Soppensee, Switzerland: Forcings, Non-linear Responses and Recovery</li><li>• Echos of acid rain: a paleo-ecotoxicological assessment of acidification and metal pollution in Lake 10 (Atikameksheng Anishnawbek First Nation Reserve, Northeastern Ontario, Canada)</li><li>• Recovery pathways in deep lakes</li><li>• Using Computational Modelling to Study Lake Ecosystem Recovery</li></ul>
13:45 - 14:00		Paton Julia	
14:00 - 14:15		Langdon Pete	
14:15 - 14:30		Foster Tim	
14:30 - 14:45			
14:45 - 15:00	III-7-The coevolution of environments and biodiversity	Cheng Yuanyu	<ul style="list-style-type: none"><li>• Team science leverages substantial advances in paleolimnology through the NSERC Canadian Lake Pulse program</li><li>• Speciation processes and diversification in the genus Salmo</li><li>• Evaluation of water physico-chemistry as a correlate of parasitic infestation of fishes inhabiting OPA reservoir feeder rivers, southwest Nigeria</li></ul>
15:00 - 15:15		Sodeland Marte	
15:15 - 15:30		Abiodun Emmanuel	
15:30 - 16:00	COFFEE BREAK		
16:00 - 16:15	IV-1-Biogeochemical cycles in the subsurface: molecular and ...	Roeser Patricia	<ul style="list-style-type: none"><li>• Barite as a mineral proxy for salinization in a paleo freshwater lake</li><li>• Where's Wally: a metagenomic pipeline to uncover microbial anaerobic metabolisms from environmental samples</li></ul>
16:15 - 16:30		Picard Mailys	
16:30 - 16:45	IV-3-Paleolimnological Insights into Carbon Cycling in Lakes	Mcgowan Suzanne	<ul style="list-style-type: none"><li>• The drivers of carbon sedimentation in eutrophic floodplain lakes</li><li>• Organic carbon accumulation rate in natural lakes of mainland France: contemporary estimations and long-term trajectories.</li><li>• Increasing carbon burial over recent decades despite re-oligotrophication in deep peri-alpine lake Aiguebelette, France</li><li>• Terrestrial and aquatic carbon storage and cycling in Australian lacustrine sediments: MISS to present</li></ul>
16:45 - 17:00		Frison Justine	
17:00 - 17:15		Jenny Jean-Philippe	
17:15 - 17:30		Cadd Haidee	
17:30 - 18:00	SYMPOSIUM GUEST TALK		
18:00 - 19:30	POSTER SESSION (III-5, III-7 AND IV-1, IV-3) + REFRESHMENTS		