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# QUATERNaire 12

PARIS 2020

## PROGRAMME



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3<sup>rd</sup>-5<sup>th</sup> February 2020  
Centre de colloques, Campus Condorcet, Paris-Aubervilliers



LABORATOIRE DE  
GÉOGRAPHIE PHYSIQUE  
ENVIRONNEMENTS QUATERNAIRES ET ACTUELS  
UMR 8591



UNIVERSITÉ PARIS 1  
PANTHÉON SORBONNE  
UNIVERSITÉ PARIS-EST CRÉTEIL  
**UPEC**  
UNIVERSITÉ PARIS-EST CRÉTEIL

The Laboratory of Physical Geography (UMR 8591, Meudon) is organising, from 3<sup>rd</sup> to 5<sup>th</sup> February 2020, the 12<sup>th</sup> International conference on Quaternary in Paris-Aubervilliers under the patronage of the AFEQ-CNFS INQUA.

The objectives of Q12 Meeting are to (1) present research news and associated results; (2) discuss new investigation methods and their applications in response to various problematics and environments; (3) feed discussions around the contribution of this research to environmental and societal issues.

## COLLABORATION WITH THE GFG

For this edition of the Quaternaire meetings, the AFEQ-CNFS INQUA is associated with the French Group of Geomorphology (GFG). The week will continue with 2 days dedicated to the spread and promotion of the work of PhD students and young PhDs in geomorphology. Attendees to Q12 meeting are highly encouraged to attend these Young Geomorphologists Days (JJG).



## Key numbers

More than **170** registered attendees (**190** including the JJG)  
from **13** European and non-European countries

**20** volunteers

**2** invited speakers (+ **1** speaker at the JJG)

**8** sessions Q12 + **5** sessions JJG

**129** abstract submissions (**159** including the JJG)

**66** oral communications (**88** including the JJG)

**60** posters (**71** including the JJG)

Total budget: ca. **36 k€** supported by **17** sponsors and partners

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The **French Association for Quaternary Research** is a **multidisciplinary group** including archaeologists, botanists, climatologists, geographers, geologists, geophysicians, palaeontologists, palynologists, pedologists et zoologists interested in the Quaternary period. Founded in 1962, the AFEQ merged with the French National Committee of the INQUA in 2012. The unified AFEQ-CNF INQUA is thus the **representative of the French community in the international context** of the INQUA.

The association welcomes researchers from France and abroad and **promote Quaternary Research** with various ways:

- the **Q conferences** every two years,
- one **Séance Spécialisée de la SGF** (AFEQ-SGF Days) a year,
- an **annual fieldtrip**,
- the publication of the journal **Quaternaire**.

Additionally, the AFEQ-CNF INQUA supports young scientists with subvention to attend international conference and the **Franck Bourdier Thesis Award** given every two years during the Q conferences.

During this 12<sup>th</sup> edition and or the first time, the association will also rewards a French-speaker professional whose career has been dedicated to Quaternary sciences, whatever the discipline, with the newly created **Henriette Alimen Medal**.

<https://afeqeng.hypotheses.org/>

 **Association Française pour  
l'Etude du Quaternaire**  
 **@quaternaristes**





## MONDAY 3 FEBRUARY

- > 8:45 - 9:30      *Coffee and registration*  
 > 9:30 - 10:00      *Q12 conference opening*

### SESSION 1 - 10:00-12:30

**The Quaternary environments of human occupations : dynamics, variabilities and mutations vs. adaptations, territorial strategies and environmental modifications**

**Convenors: Grégory Dandurand, Anaëlle Vayssiére, Mathieu Rué & Marylise Onfray**

10:00 - 10:15      → Découverte et datation des plus anciennes occupations acheuléennes du NW de l'Europe dans les dépôts alluviaux de la Haute terrasse de la Somme à Abbeville (Somme) - *Pierre Antoine, Marie-Hélène Moncel, Pierre Voinchet, Jean-Luc Locht, Daniel Amselem, David Hérisson, Pierre Hurel, Jean-Jacques Bahain*

10:15 - 10:30      → Enregistrements quaternaires et indices d'occupation paléolithiques sur les plateaux de la région Centre: nouvelles données issues de l'archéologie préventive - *Céline Coussot, Morgane Liard, Philippe Gardère, Sophie Clement*

10:30 - 10:45      → Les séquences loessiques du Pléniglaciaire moyen et supérieur de Renancourt (Amiens, Picardie) : contexte stratigraphique et paléoenvironnemental des occupations gravettiennes - *Sylvie Coutard, Clément Paris, Olivier Moine, Pierre Antoine*

10:45 - 11:00      → Appréhender les dynamiques d'occupation d'un site par la fuliginochronologie : étude diachronique des rythmes d'occupation humaine sur le site paléolithique de la Grotte Mandrin (Drôme, France) - *Sérgolène Vandevelde, Jacques Brochier, Christophe Petit, Ludovic Slimak*

11:00 - 11:15      → A sedimentary record of the Lateglacial-Holocene transition: impacts of paleoenvironmental changes on the spatial organization of settlements: îlot Renaudin (Angoulême, Charente, SW France) - *Grégory Dandurand, Julie Dabkowski, Nicole Limondin-Lozouet, Agnès Gauthier, Miguel Biard*

11:30 - 11:45      → Interactions Homme / Environnement depuis le Néolithique : impacts anthropiques sur l'évolution morphodynamique holocène du site de Mareuil-le-Port (Marne, Grand-Est) - *Adrien Gonnet, Cécilia Cammas, François Coupard*

11:45 - 12:00      → Évolution de la plaine alluviale de la Garonne et implantations des ports fluviaux au cours du Moyen Age et de l'époque Moderne (13e-16e s.) : approche régionale et études de cas (Cadillac, Grenade) - *Jean-Michel Carozza, Michel Bochaca, Vincent Joineau, Philippe Valette, Anne Colin, Séverine Lescure, Mélodie David*

12:00 - 12:15      → Géoarchéologie de la ville de Cadix : une séquence sédimentaire exceptionnelle au cœur d'une ville plurimillénaire (Espagne) - *Ferréol Salomon, Gilles Rixhon, José Juan Díaz, Macarena Lara, Darío Bernal-Casasola*

12:15 - 12:30      → Reconstitutions des dynamiques socio-environnementales à l'Holocène récent dans le secteur de Nunura (Désert de Sechura, Pérou) à partir du croisement de données multi-proxy intra- et extra-site - *Valentina Villa, Aurélien Christol, Nicolas Goepfert*

- > 12:30 - 14:00      *Lunch (Foyer) / Posters-Sessions 1 & 3 (Room 100)*

**Invited speaker: FRANCK LAVIGNE - 14:00-15:00**  
**Environmental impact of tropical volcanic eruptions, from local to global**

### SESSION 1 (continued) - 15:00-16:15

15:00 - 15:15      → Climate change and paleolandscape evolution during the Later Stone Age to Neolithic transition in the Central Afar region (Ethiopia & Djibouti) - *Carlo Mologni, Laurent Bruxelles, Lamya Khalidi, Jessie Cauliez, Marie Revel, Fabien Arnaud, Ménard Clément*

15:15 - 15:30      → Géoarchéologie des paysages agraires de l'oasis de Shimal (Emirats Arabes Unis) - Coévolutions, et dissensions des communautés et des environnements dans la 2nde moitié de l'Holocène - *Sophie Costa, Hatem Djerbi, Gourguen Davtian, Alain Carré, Julien Charbonnier, Charlotte Hurel, Louise Purdue*

15:30 - 15:45      → Aşıklı Höyük Pre-Pottery Neolithic site in central Anatolia (c. 10400-c. 9300 cal BP ): what role played climate in the development of the site and, later, in Pottery Neolithic birth in the region ? - *Catherine Kuzucuoglu, Sérgolène Saulnier-Copard, Damase Mouralis, Ali Gürel, Jean-Pascal Dumoulin, Alain Riveron, Jean-François Pastre, Martin Godon*

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15:45 - 16:00 → Volcanism in south-Cappadocia (Turkey): evidence of Late Glacial to Historical time eruptions and relationships with human settlements - *Damase Mouralis, Catherine Kuzucuoglu, Ségolène Saulnier-Copard, Ali Gürel, Jean-Pascal Dumoulin, Alain Riveron, Jean-François Pastre, Martin Godon*

16:00 - 16:15 → To build or not to build. Examining the relation Man-Environment through the earthen construction techniques: the case of the PPNA site of Klimonas in Cyprus - *Pantelitsa Mylona, Julia Wattez, Jean-Denis Vigne*

> 16:15 - 16:45

Coffee break (Foyer)

## SESSION 6 - 16:45-18:15

### Long-term environmental trajectories for sustainable ecosystem management and restoration

Convenors: *Laurent Lespez, Didier Galop, Laurent Schmitt & Axel Beauchamp*

16:45 - 17:00 → Patterning Holocene lake dynamics and detecting human impacts as far back as Prehistory: palaeoecological and data mining key tools for eutrophic lake management - *Yannick Miras, Aude Beauger, Jerry Lonlac Konlac, Benjamin Legrand, Delphine Latour, Karen Serieyssol, Paul Ledger, Marlène Lavrieux, Jean-Luc Peiry, Engelbert Mephu*

17:00 - 17:15 → Quelles dynamiques hydro-écologiques dans les annexes hydrauliques des grands fleuves à l'Anthropocène ? Première approche pluridisciplinaire des sédiments stockés dans la lône de Limony (vallée du Rhône, France) - *André-Marie Dendievel, Nicolas Noclin, Sophia Vauclin, Brice Mourier, Thierry Winiarski*

17:15 - 17:30 → La "renaturation" des rivières normandes est elle envisageable ? Etude des héritages géomorphologiques liés à l'aménagement millénaire des cours d'eau normands - *Axel Beauchamp, Laurent Lespez, Anne-Julia Rollet*

17:30 - 17:45 → How dealing with the significance of historical surfacic changes documented from remote-sensed data in mid-sized rivers? - *Timothée Jautzy, Pierre-Alexis Herrault, Valentin Chardon, Schmitt Laurent, Gilles Rixhon*

17:45 - 18:00 → Que reste-t-il de « naturel » au sein de la réserve biosphère delta du Danube ? Apport d'une approche par la longue durée - *Jean-Michel Carozza, Laurent Carozza*

18:00 - 18:15 → Hydro-agro-system of the wetlands in the Central Maya Lowlands: land use sustainability and the joint water management (hinterland of Naachtun, Petén tropical forest, Guatemala) - *Cyril Castanet, Amaury Fernandes, Aline Garnier, Marc Testé, Julien Caverio, Anne-Lise Develle-Vincent, György Sipos, Lydie Dussol, Louise Purdue, Eva Lemonnier, Philippe Nondédeo*

## Franck Bourdier Thesis Award - 18:15-19:00

AFEQ-CNF INQUA General Assembly - 19:00-19:30

## TUESDAY 4 FEBRUARY

## SESSION 4 - 8:30-10:30

### Continental biodiversity and the spatio-temporal variability of Quaternary environments

Convenors: *Salomé Granai, Aline Garnier & Yannick Miras*

08:30 - 08:45 → Contribution of small vertebrates for the characterization of climatic variations from MIS 5 to MIS 3 in the northern half of France - *Lebreton Loic, Sylvain Soriano, David Hérisson, Jean-Luc Locht, Marimoutou Qazi, Emmanuelle Stoetzel*

08:45 - 09:00 → Preservation of environmental signature in the oxygen, carbon and strontium isotopes of palaeolithic reindeer carbonate via intratooth analysis - *Natacha Catz, Olivier Bignon-Lau, Kate Britton*

09:00 - 09:15 → Le lac de barrage volcanique de la Loire à Rieuviel (Ardèche) : intérêt paléoenvironnemental, téphro-stratigraphique et archéologique, une chronologie en question - *Emmanuelle Defive, Yannick Miras, Sébastien Nomade, Hervé Guillon, Didier Miällier, Thierry Pilleyre, Gwénolé Jouannic, Piotr Moska, Konrad Tidika, Tomasz Goslar, Jean-Paul Raynal*

09:15 - 09:30 → Spatial vegetation dynamics over the last 35,000 years in West Africa. The contribution of phytoliths in a multi-proxy study (Falémé valley, Sénégal) - *Aline Garnier, Laurent Lespez, Sarah Davidoux, Michel Rasse, Brice Lebrun, Chantal Tribolo, Maria Lorenzo Martinez, Benoît Chevrier, Katja Douze, Eric Huysecom*

09:30 - 09:45 → Holocene paleoenvironments in the Western Mediterranean Sea along a NorthSouth Transect - *Vincent Coussin, Aurélie Penaud, Nathalie Combourieu-Nebout, Yannick Miras, Sandra Picard Casal, Odile Peyron, Nadine Tisnérat - Laborde, Nathalie Babonneau, Antonio Cattaneo, Jacques Deverchère*



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09:45 - 10:00 → Premiers éléments de construction d'un cadre paléoenvironnemental régional à partir des malacocénoses holocènes du nord-est marocain : les séquences de Blirh et d'Aït Said ou Idder - *Quentin Wackenheim, Julie Dabkowski, Nicole Limondin-Lozouet, Larbi Boudad, Jean-François Berger, Bruno Depreux, David Lefèvre*

10:00 - 10:15 → Histoire des feux, dynamiques environnementales et pratiques anthropiques du Mésolithique récent à la fin du Néolithique dans la Plaine de Caen (Normandie) - *Laurence Lemer, Agnès Gauthier, Laurent Lespez*

10:15 - 10:30 → Calibration du proxy Microcharbon préservé dans les sédiments marins pour étudier le changement de régime de feu : Cas d'étude sur la Péninsule Ibérique - *Marion Genet, Anne-Laure Daniau, Vincent Hanquiez, Florent Mouillot, Sabine Schmidt, Valérie David*

> 10:30 - 11:00 Coffee break (Foyer)

## SESSION 2 - 11:00-12:30

**Palaeoclimate, palaeoenvironmental and archaeological records from Middle/Late Pleistocene continental successions over the Mediterranean**

Convenors: **Valentina Villa, Alison Pereira, Giovanni Zanchetta & Biagi Giaccio**

11:00 - 11:15 → 10 years of 40Ar/39Ar dating in central and southern Italy: redraw the chronological framework of the environmental changes and human settlement over the last 800 ka - *Sébastien Nomade, Alison Pereira, Biagio Giaccio, Jean-Jacques Bahain, Christophe Falguères, Hervé Guillou, Niklas Leicher, Giorgio Mannella, Fabrizio Marra, Marie Hélène Moncel, Eleonora Regattieri, Vincent Scao, Pierre Voinchet, Giovanni Zanchetta, Bernd Wagner*

11:15 - 11:30 → Des téphras piégés par le karst ardéchois : contexte et chronostratigraphie du remplissage de l'Aven du Devès de Reynaud (Saint-Remèze, Ardèche) - *Simon Puaud, Yves Billaud, Olivier Tombret, Laurent Crépin, Mélanie Lepenant, Matthieu Lebon, Antoine Zazzo, Jean-Jacques Bahain, Christophe Falguères, Lisa Garbe, Pierre Voinchet, Évelyne Debard, Jean-François Pastre*

11:30 - 11:45 → Pleistocene tephrostratigraphy and palaeoclimatology in the central Mediterranean region: ongoing research in Fucino Basin (central Apennines, Italy) - *Giorgio Mannella, Biagio Giaccio, Niklas Leicher, Lorenzo Monaco, Sébastien Nomade, Alison Pereira, Eleonora Regattieri, Bernd Wagner, Giovanni Zanchetta, \* FUTURE research team*

11:45 - 12:00 → Enregistrements climatiques quaternaires en Turquie : une présentation - *Catherine Kuzucuoğlu*

12:00 - 12:15 → The lacustrine paleoclimatic record from the Sulmona Basin (central Italy): postcards from past interglacial periods - *Eleonora Regattieri, Biagio Giaccio, Giovanni Zanchetta, Sébastien Nomade, Giorgio Mannella, Alison Pereira, Russell N. Drysdale*

12:15 - 12:30 → Vegetation and climate history in the Mediterranean Levant during the late Pleistocene - *Dafna Langgut, Gonen Sharon, Rachid Cheddadi*

> 12:30 - 14:00 Lunch (Foyer) / Posters-Sessions 2, 3 & 4 (Room 100)

## Invited speaker: HARTMUT HEINRICH - 14:00-15:00

Heinrich Events and Stadials interdependencies:

A conceptual model deduced from Pleistocene eolian deposits on the Canary Island

## SESSION 3 - 15:00-16:00

**Structures and dynamics of past and modern periglacial and glacial environments**

Convenors: **Olivier Moine, Pierre Antoine, Frédéric Bouchard & Antoine Séjourné**

15:00 - 15:15 → Evidence for uninterrupted glacial and interglacial dust accumulation in Eurasian dry steppe regions - *Ulrich Hambach, Daniel Veres, Daniela Constantin, Christian Zeeden, Stephan Pötter, Igor Obreht, Christian Laag, Janina Bösken, Philipp Schulte, Slobodan Marković, Frank Lehmkühl, Alida Timar-Gabor*

15:15 - 15:30 → Sédimentologie et géochimie des loess de la vallée du Rhône : comparaison avec d'autres loess européens - *Mathieu Bosq, Pascal Bertran, Jean-Philippe Degeai, Sebastian Kreutzer, Olivier Moine, Alain Queffelec*

15:30 - 15:45 → Le pergélisol pléistocène en France : état de la question - *Pascal Bertran*

15:45 - 16:00 → Thermokarst lake development in syngenetic ice-wedge polygon terrain in the Eastern Canadian Arctic during the Holocene - *Frédéric Bouchard, Daniel Fortier, Michel Paquette, Vincent Boucher, Reinhard Pienitz, Isabelle Laurion*

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> 16:00 - 16:30

Coffee break (Foyer)

16:30 - 16:45 → Carbon cycling in thermokarst lakes of Central Yakutia: seasonal trends and a paleoenvironmental perspective - *Lara Hughes-Allen, Frédéric Bouchard, Antoine Séjourné, Christelle Marlin, François Costard, Christine Hatté*

16:45 - 17:00 → Molards, a "new" landform to track permafrost degradation around the globe - *Costanza Morino, Susan Conway, Philip Deline, Florence Magnin*

17:00 - 17:15 → La ré-avancée du lobe d'Última Esperanza lors du dernier maximum glaciaire et ses témoins géomorphologiques au Cerro Benitez (Patagonie, Chili) - *Igor Girault, Dominique Todisco, Amélie Quiquerez, Attila Çiner, Mehmet Akif Sarıkaya, Cengiz Yıldırım, Carole Nehme, Fabiana Martin, Luis Borrero, Derek Fabel*

17:15 - 17:30 → Emprise spatiale et chronologie des fluctuations glaciaire post-LGM en haute vallée de l'Ariège : données nouvelles et implications paléoclimatiques - *Théo Reixach, Magali Delmas, Régis Braucher, Cécile Mahé, Marc Calvet*

17:30 - 17:45 → Evidence of Holocene mountain glacier fluctuations at Clavering Island (Northeastern Greenland) from  $^{10}\text{Be}$  cosmic-ray exposure dating of moraines - *Melody Biette, Vincent Jomelli, Marie Chenet, Régis Braucher, Vincent Rinterknecht, Timothy Lane, ASTER team*

17:45 - 18:00 → Géochronologie et géomorphologie du courant glaciaire de Boothia-Lancaster, Arctique canadien - *Tommy Tremblay, Michel Lamothe*

> 19:00 - 23:00

Gala dinner (Restaurant 'Les Belles Plantes')

## WEDNESDAY 5 FEBRUARY

### SESSION 5 - 9:00-10:30

#### Quaternary Geochronology: Coupling Methodological Advances to Innovative Case Studies

Convenors: **Mathieu Duval, Sebastian Kreutzer, Claire Rambeau & Gilles Rixhon**

09:00 - 09:15 → Constraining aggradation mode of fluvial deposits using a  $^{10}\text{Be}/^{26}\text{Al}$  depth profile and modelling - *Nathan Vandermaelen, Veerle Vanacker, Koen Beerten, Marcus Christl*

09:15 - 09:30 → Datation croisée (U-Th et radiocarbone) de concrétions fuligineuses, modélisation bayésienne de la durée des phases d'occupation et fuliginochronologie - *Sérgolène Vanderve, Adelphine Bonneau, Edwige Pons-Branchu, Jacques Brochier, Tom Higham, Christophe Petit, Ludovic Slimak*

09:30 - 09:45 → Dating the Quaternary evolution of NW Anatolia, insights from and comparison between luminescence, radiocarbon, U/Th and apatite (U-Th)/He methods - *Mehmet Korhan Ertuğraç, Eren Şahiner, Azad Sağlam-Selçuk, Gürsel Sunal, Alper Gürbüz, Cengiz Zabıcı, Niyazi Meriç, Sumiko Tsukamoto, Edwige Pons-Branchu, István Dunkl*

09:45 - 10:00 → Etude comparative des signaux pIRIR des feldspaths: contribution à la chronologie de la séquence sédimentaire de Stokes (Emirat d'Umm al-Qawain, EAU) - *Mailys Richard, Norbert Mercier, Adrian Parker, Kira Raith, Gareth Preston, Jean-François Berger*

10:00 - 10:15 → Post-Last Glacial Maximum glacier variations in the southern Écrins massif (westernmost Alps): Insights from geomorphological mapping,  $^{10}\text{Be}$  exposure dating and palaeoglacier reconstruction - *Felix Martin Hofmann, Helena Alexanderson, Philippe Schoeneich, Jordan R. Mertes, Laetitia Leanni, Georges Aumaître, Didier L. Bourlès, Karim Keddadouche*

10:15 - 10:30 → New advances in U-Th dating of Quaternary materials through the use of isotopic mapping obtained by La-Fs HR-ICP-MS coupling - *Asmodée Galy, Loïc Martin, Edwige Pons-Branchu, Chantal Tribolo, Norbert Mercier, Christophe Péchéyran*

> 10:30 - 11:00 Coffee break (Foyer)

11:00 - 11:15 → Quel est l'âge du Pont d'Arc ? - *Kim Génuit, Jean-Jacques Bahain, Jean-Jacques Delannoy, Marceau Gresse, Stéphane Jailllet, André Revil, Pierre Voinchet*

11:15 - 11:30 → The transition from the MSA to the LSA in El Harhoura 2 cave (North Western Africa) in the light of multi-dating approach - *Eslem Ben Arous, Christophe Falguères, Qingfeng Shao, Norbert Mercier, Olivier Tombret, Mailys Richard, Mohammed El Hajraoui, Roland Nespooulet*

11:30 - 11:45 → High Resolution Palaeomagnetic and Environmental Magnetic Data from the Last Interglacial to Glacial Transition in a Loess-Palaeosol Sequence (LPS) from the Lower Danube (Romania) — Implications for the Chronology of the S1 Pedocomplex in Eurasian LPSs - *Christian Laag, Ulrich Hambach, Daniel Veres, Christian Zeeden, Kathrin Worm, Christian Rolf*



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11:45 - 12:00 → Les radionucléides cosmogéniques et leur utilisation en archéologie et paléoanthropologie. Dernières applications - *Anne-Elisabeth Lebatard, Didier Bourlès, Régis Braucher*

12:00 - 12:15 → Contribution of cave infill datings in Normandy (France) to the landscape evolution of the Seine Valley during the Quaternary - *Carole Nehme, Daniel Ballesteros, Andrew Farrant, Dominique Todisco, Diana Sahy, Michael J. Grappone, Joel Rodet, Jean-Claude Staigre, Damase Mouralis*

12:15 - 12:30 → Dynamique fluvio-glaïeuse et chronologie au front du lobe lyonnais dans la région du Bas Dauphiné - *Thibault Roattino, Christian Crouzet, Jean-François Buoncristiani, Riccardo Vassallo, Julien Carcaillet*

> 12:30 - 14:00      **Lunch (Foyer) / Posters-Sessions 5, 7 & 8 (Room 100)**

## Henriette Alimen Medal - 14:00-14:45

### SESSION 7 - 14:45-16:00

Climatic response to orbital forcing, from the Pliocene to today

Convenors: **Gilles Ramstein, Franck Bassinot, Fanny Lhardy & Thibaut Caley**

14:45 - 15:00 → Constraining the LGM ocean circulation in a climate model with multiproxy data - *Fanny Lhardy, Nathaelle Bouttes, Didier Roche, Claire Waelbroeck, Aurélien Quiquet, Lise Missiaen*

15:00 - 15:15 → Orbital-scale variations of  $\delta^{18}\text{O}_{\text{atm}}$  in response to low latitudes changes: a modelling approach - *Thomas Extier, Didier Roche, Amaelle Landais, Louis François*

15:15 - 15:30 → 10 000 years of hydrological changes in Yellowstone Lake (USA) based on the analysis of oxygen isotopes in diatoms - *Rosine Cartier, Daniel Conley, Melanie Leng, Jack Lacey, Petra Zahajská, Sabrina Brown, Christopher Schiller, Cathy Whitlock, Sherilyn Fritz*

15:30 - 15:45 → Saharan dust deposited in Lake Bastani, Corsica: the most northern dust record of the African Humid Period ? - *Maxime Leblanc, Charlotte Skonieczny, Pierre Sabatier, Viviane Bout-Roumazeilles, Christophe Colin, Maxime Debret, Isabelle Jouffroy-Bapicot, Serge Miska, Boris Vannière*

15:45 - 16:00 → Palynology, biostratigraphy and paleoceanography of the Plio-Pleistocene at ODP Site 887, Gulf of Alaska - *Coralie Zorzi, Jens Matthiessen, Anne de Vernal*

> 16:00 - 16:30      **Coffee break (Foyer)**

### SESSION 8 - 16:30-17:30

Role of climate and environments on the dynamics of human populations from their appearance to the establishment of civilizations

Convenors: **Thibaut Caley, Bruno Malaizé, Antoine Souron & William Banks**

16:30 - 16:45 → Possible impact des changements environnementaux sur les derniers néandertaliens et l'implantation de l'homme anatomiquement moderne dans le sud-ouest de la France (48 000 et 35 000 ans avant le présent) - *Tiffanie Fourcade, Maria Fernanda Sanchez Goñi, Christelle Lahaye, Linda Rossignol, Francesco d'Errico*

16:45 - 17:00 → Investigating relationships between technological variability and ecology: the case of the Middle Gravettian (ca. 32-28 ky cal. BP) in France - *Anaïs Vignoles, William Banks, Laurent Klärig*

17:00 - 17:15 → Suitable climatic conditions for hominins from central Sahel to eastern Africa during the mid-to-late Pliocene - *Camille Contoux, William E Banks, Anaïs Vignoles, Doris Barboni, Jean-Renaud Boisserie, Olivier Chavasseau, Frédéric Fluteau, Corentin Gibert, Franck Guy, Olga Otero, Pierre Sepulchre, Antoine Souron, Gilles Ramstein*

17:15 - 17:30 → On the paleoecology of *Paranthropus robustus* (Mammalia, Hominidae) from South Africa and the potential impact of climatic changes on its extinction - *Antoine Souron, Thibaut Caley*

> 17:30 - 18:00      **Q12 conference closing**

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## THURSDAY 6 FEBRUARY

> 9:30 - 12:00      *Urban fieldtrip along the Seine: Geomorphology, archaeology and risks*

Emmanuèle Gautier (LGP-Paris 1) and Christine Chaussé (LGP-INRAP) will lead you at the discovery of the geomorphology, archaeology and risks along the Seine river in Paris centre.

This free fieldtrip is open to all attendees to Q12 and/or the JJG.

> From 12:30  
and Friday 7

**Young Geomorphologist Days**

## POSTERS

## MONDAY 3 FEBRUARY

### SESSION 1

Dynamique des territoires fluviaux rhénans au cours de l'Holocène : Etude géoarchéologique de la plaine alluviale du Rhin entre Drusenheim/Rheinmünster et Seltz/Rastatt - Ferréol Salomon, Claire Rambeau, Laurent Schmitt, Frank Preusser, Daria Klekovkina, Francisco Silva, Pierre-Alexis Herrault, Gilles Rixhon, Damien Ertlen, Anne Gebhart

12 000 ans d'histoire dans la vallée du Sémillon : premiers résultats de l'opération archéologique et paléoenvironnementale du site de Vimont, le Brazier - Axel Beauchamp, Cécile Germain-Vallée, Arthur Glais, Pierre Mauger, Elisa Rollinger, Sola Nkuka, Sarah Lebeurrier

Paleoenvironmental study of Oum Ali region (Tebessa, Algeria) during Quaternary, through the study of fluvial terrace of Khenigue Wadi - Nabil Defaflia

Environmental factors of human occupations in mountain areas during the transition MIS 2-1: Picos de Europa, northern Spain - Alberto Martínez-Villa, Daniel Ballesteros, Diego J. Álvarez-Lao, Adrián Álvarez-Vena, Jorge Sanjurjo, Marelia Gil-Fernández, Montserrat Jiménez-Sánchez

Medieval territorial organization of Eastern Normandy (France) based on constructive stone diffusion - Daniel Ballesteros, Aude Painchault, Beatriz Puente-Berdasco, Carole Nehme, Edwige Pons-Branchu, Roussel Bastien, Dominique Todisco, François Delisle, Jose Ignacio Garcia Alonso, Mariacristina Vanaro, Damase Mouralis

Les archives pédosédimentaires holocènes de la vallée de l'Arques (Arques-la-Bataille, Seine-Maritime) : approche géoarchéologique et paléoenvironnementale - Marine Laforge, Chantal Leroyer, David Aoustin, Gaël Barracand

Variabilité millénaire du Lac Pomacochas, Nord Pérou à l'Holocène supérieur, relation avec la culture Chachapoyas - Bruno Turcq, James Apaéstegui, Claudia Morales, Sergio Morera, Christian Quintana, Marco Yseki, Renato Cordeiro, Luciane Moreira, Isabelle Billy, Bruno Malaizé, Patricia Moreira-Turcq

Impact de la bioturbation par les vers de terre sur les assemblages archéologiques : expérimentation taphonomique en milieu naturel - Clément Recq, Jérôme Mathieu

Premiers résultats palynologiques à Umm Al Quwain (UAE) - Chantal Leroyer, David Aoustin, Jean-François Berger, Federico Borgi, Sophie Méry, Adrian G. Parker

Evolution de l'environnement autour d'un site de l'âge du Fer en position d'estran à Plougasnou/Saint-Jean-du-Doigt (Finistère, France) - David Aoustin, Chantal Leroyer, Dominique Marguerie, Vincent Bernard, Marie-Yvane Daire

The construction of territories on the Croatian Kvarner archipelago (Krk and Cres Island). First results - Marine Rousseau, Vincent Bichet, Charly Massa, Morana Čaušević-Bully, Hervé Richard

### SESSION 6

Trajectoire à long terme et restauration de cours d'eau : le cas de la Mérantaise (Essonne, 91 / Yvelines, 78) - Lucile de Milleville, Laurent Lespez, Frédéric Gob, Evelyne Tales, Marion Jugie

Les marqueurs d'anthropisation en contexte forestier, l'exemple de la forêt d'Ecouves (Orne) - Nicolas Blanchard, Damase Mouralis, Dominique Todisco

Impacts des aménagements hydrauliques sur un hydrosystème à anastomose et à faible énergie à partir d'une approche géohistorique et de terrain : l'exemple du fleuve Charente sur le secteur de l'Île de la Baine (Chaniers, Charente-Maritime) - Amélie Duquesne, Jean-Michel Carozza

TUESDAY 4 FEBRUARY

## SESSION 2

Chronologie TL and ESR/U-Th du site paléolithique d'Orgnac III, une séquence de référence du Pléistocène moyen ardéchois - Jean-Jacques Bahain

Variabilité climatique des derniers 120 ka dans le nord de la Tunisie à partir de l'étude de spéléothèmes de la grotte de la Mine – Mise en évidence d'une forte croissance liée à une hydrologie active dès 28 ka - *Sahar Ben Hamida*

Geochronological investigations for Lower Palaeolithic archaeological sites from Basilicata: comparison with the Vulture's tephrostratigraphy - Alison Pereira, Pierre Voinchet, Marie-Hélène Moncel, Carmen Santagata, Marcello Piperno, Roxane Rocca, Daniele Aureli, Jean-Jacques Bahain, Christophe Falguères, Sébastien Nomade

## SESSION 3

The eastern Rhine Graben Boundary Fault: first results from paleoseismological trenching - K. Reichert, J. Hürtgen, S. Baize, W. Abbas, F.R. Cinti, E.M. Cushing, K. Diederichs, A. Eulen, H. Jomard, S. Mader, S. Pena-Castellnou, J.R. Ritter, T. Rockwell, H. Sana, G. Seitz, J. van der Wal, C. Weismüller

A palaeoclimate record comparison over the Last Glacial provided by stable isotope compositions of earthworm calcite granules from western Europe loess-palaeosol sections - Charlotte Prud'homme, Peter Fischer, Kathryn Fitzsimmons, Olivier Moine, Olaf Jöris, Mathias Vinnepand, Hubert Vonhof, Christine Hatté, Andreas Vött

Timing of Lateglacial moraines in the Northern and Western parts of the Ecrins massif (French Alps) - Philippe Schoeneich, Philip Deline, Julien Carcaillet, Irene Schimmelpfennig, Xavier Bodin, Philippe Choler

L'enclacement de l'Aubrac au Pléistocène supérieur : premières datations par nucléides cosmogéniques terrestres - Arthur Ancrenaz, Régis Braucher, Emmanuelle Defive, Alexandre Poiraud, Magali Delmas, Didier Roche, Johannes Steiger

Le gisement paléolithique des Bossats à Ormesson (Seine-et-Marne, France) : une séquence sédimentaire unique du Pléniglaciaire weichselien jalonnée de niveaux d'occupation humaine - Henri-Georges Naton, Pierre Bodu, Olivier Moine

Glacial and Post-glacial Geomorphology of the Nain Archipelago (Labrador, Canada): Methodology and First Results - Clément Recq, Bhiry Najat, Dominique Todisco, Vincent Rinterknecht

Les séquences sédimentaires post-glaciaires des grottes à mégafaune du Cerro Benitez (Patagonie, Chili) - Igor Girault, Dominique Todisco, Fabiana Martin, Luis Borrero, Carole Nehme

Loess deposits in the southern Caucasus: new archives from a hidden loess world and its paleoenvironmental interpretation - Markus Fuchs, Tilmann Wolpert, Daniel Wolf, Lilit Sahakyan, Manuel Pappusch, Hayk Hovakimyan, Kristina Sahakyan, Christiane Richter, Yesmine Trigu, Dominik Faust

The dynamics of landslides induced by ground ice-degradation: two case studies in northern Iceland - Susan Conway, Costanza Morino, Matt Balme, Þorsteinn Sæmundsson, Jón Kristinn Helgason, Colm Jordan, John Hillier, Tom Argles

## SESSION 4

Produire un référentiel actuel sur l'enregistrement des marqueurs paléoenvironnementaux des pratiques agraires dans les archives sédimentaires. Les premiers résultats du projet interdisciplinaire PAYAMA (PAYSages Agraires d'hier et d'Aujourd'hui en terre Maya) - Aline Garnier, Marc Testé, Eva Lemonnier, Louise Purdue, Lydie Dussol, Felipe Trabanino, Cyril Castanet

First direct evidence of vegetation burning in SW Madagascar during the Final Pleistocene - Aziz Ballouche, Alemseged Beldados, Théodore Razakamanana

Variabilité environnementale intra-interstade et contexte de l'occupation humaine paléolithique supérieur du site d'Amiens-Renancourt 1 (France) contemporaine de l'interstade GI3 - Olivier Moine, Pierre Antoine, Sylvie Coutard, Christine Hatté, Gilles Guérin, Clément Paris, Ségolène Saulnier-Copard

Paysages végétaux et agraires dans les basses-terres tropicales Mayas : Le cas du site archéologique de Naachtun (Petén, Guatemala) - Marc Testé, Aline Garnier, Cyril Castanet, Louise Purdue, Eva Lemonnier, Lydie Dussol, Enecon Oxlaj, Sébastien Kerdreux, Nicole Limondin-Lozouet, Philippe Nondédéo

Etude malacologique de la séquence Tardiglaciaire-Holocène de l'îlot Renaudin à Angoulême : première approche pour un référentiel sur le sud-ouest de la France - Nicole Limondin-Lozouet, Julie Dabkowski, Valentine Fichet, Grégory Dandurand, Miguel Biard

Discoveries of Quaternary mammal fossils in high-altitude caves from Picos de Europa mountain range, NW Iberia - Diego J. Álvarez-Lao,

Daniel Ballesteros, Adrián Álvarez-Vena, Pablo Valenzuela, Noelia Sánchez-Fontela, Montserrat Jiménez-Sánchez

La moyenne vallée du Bao Bolon (Sénégal) : un géosystème soudanien et son évolution à l'Holocène. Nouvelles données paléoenvironnementales - Emmanuel Weisskopf, Mathilde Stern, Loubna El Madouri, David Landry, Aline Garnier, Aziz Ballouche

Caractériser des stades de confinement lagunaire (SCL) en utilisant les ostracodes et la Spectroscopie Moyen InfraRouge (SMiR).

Approche pour l'étude comparative de l'évolution spatio-temporelle des lagunes méditerranéennes en contexte tempéré - Vittori Cécile, Stoil Chapkanski, Ferréol Salomon, Pierre Carbonel, Ilaria Mazzini, Jean-Philippe Goiran, Simona Pannuzi, Maurizio D'Orefice, Piero Bellotti, Domenico Fiorenza, Damien Ertlen, Laurent Schmitt

L'émergence du vignoble de Mercurey (Bourgogne) : mise en évidence pédoanthracologique - Brian Chaize, Aurélien Christol, Isabelle

Théry-Parisot, Mathieu Fressard, Etienne Cossart

Paleoecological meaning of the micromammals from the Mousterian and Aurignacian levels of La Güelga cave (northern Spain) - Adrián

Álvarez-Vena, Diego Álvarez-Lao, César Laplana, José Manuel Quesada, Julio Rojo, Eduardo García-Sánchez, Mario Menéndez

Palaeohydrological changes recorded from a small Moroccan Middle Atlas pond during the last 6000 cal. yr BP: a multi-proxy study -

Hanane Id Abdellah, Laurence Vidal, Abdelfattah Benkaddour, Ali Rhoujati, Guillaume Jouve, Kazuyo Tachikawa, Corinne Sonzogni, Jean-Charles Mazur, Florence Sylvestre

## WEDNESDAY 5 FEBRUARY

### SESSION 5

Radiocarbon dating of fluvial palaeochannels: which material to date? Case study in the Upper Rhine Graben, NE France - Claire Rambeau, Laurent Schmitt, Frank Preusser, Jacqueline van Leeuwen, Pim van der Knaap, Jacqueline Argant

Radiocarbon dating of "desert wetlands" (Dead Sea edge, Jordan) - Claire Rambeau, Scott D. Mc Lin, Ingmar Unkel, Eleni Asouti, Ceren Kabukcu, Sönke Szidat

Using the portable luminescence reader to assess the historical lateral mobility of river channels: preliminary promising results - Timothée Jautzy, Dominik Brill, Laurent Schmitt, Gilles Rixhon

New numerical age constraints for TD1 unit from Atapuerca Gran Dolina, Spain - Mathieu Duval, Josep M. Parés, Lee J. Arnold, Martina Demuro, Isidoro Campaña, José María Bermúdez de Castro

Electron spin resonance (ESR) dating of sediments from the Atacama Desert (Chile) – Dealing with challenging quartz - Melanie Bartz, Mathieu Duval, Helmut Brückner

Datation ESR des alluvions du Clain à Saint-Georges-Lès-Baillargeaux (Vienne) – Implications géologiques et archéologiques - Pierre Voinchet, Jean Airvaux, David Hérisson, Pierre Antoine, Cédric Beauval, Jackie DESPRIÉE, Jean-Jacques Bahain

Linking archaeology and surface exposure dating ( $^{10}\text{Be}$  and  $^{36}\text{Cl}$ ): Phoenician (?) excavation structures in northern Lebanon - Gilles Rixhon, Didier L Bourlès, Régis Braucher, Clément Flaux, Nicolas Carayon, Lucy Semaan

Optimisation de la datation d'échantillons quaternaires par les séries de l'uranium par spectrométrie de masse quadripolaire (ICP-Q-MS) - Olivier Tombret, Christophe Falguères

Development of a methodology for correcting meteoric  $^{10}\text{Be}$  inventories for incomplete retention in acidic soils - Rose Paque, Veerle Vanacker, Ilia Alomia Herrera, Franz Zehetner

Palaeoenvironmental and palaeomagnetic stratigraphy for a 250-ka covering, quasi continuous, dust accumulation - Christian Laag, Christian Zeeden, Christian Rolf, Kathrin Worm, Tobias Lauer, Martin Kehl, Eva Lehndorff, Farhad Khormali

Datation absolue d'un site du paléolithique ancien en Afrique de l'Ouest basée sur les nucléides cosmogéniques - Anne-Elisabeth Lebatard, Didier Bourlès, Régis Braucher

Un cryptotéphra du volcanisme pléistocène supérieur du Bas-Vivarais dans le remplissage de la grotte Chauvet-Pont d'Arc (Ardèche, France) - Jean-François Pastre, Evelyne Debard, Catherine Ferrier, Bernard Gély, Bertrand Kervazo, Frédéric Maksud, Sébastien Nomade

Monitoring Desert-Margin Dynamics by Innovative Trapped Charge Dating Approaches in Matmata, Tunisia - Sebastian Kreutzer, Sascha Meszner, Christopher Schmidt, Tobias Lauer, Melanie Bartz, Mathieu Duval, Moncef Bouaziz, Dominik Faust

## SESSION 7

**Temporalités de l'African Humid Period et des changements climatiques rapides de l'Holocène ancien en Afrique du Nord : le bassin-versant de la Moulouya (Maroc) - Bruno Depreux**

**Recent progress on simulating sapropel S1: development of an appropriate modeling plat-form and testing different hydrologic perturbations - Gilles Ramstein, Laurent Li, Tristan Vadsaria, Sébastien Zaragosi, Jean-Claude Dutay**

**Réponse des paléo-glaciers de la Cordillère Cantabrique (Asturies, Espagne) pendant la dernière déglaciation - Laura Rodríguez-Rodríguez, Vincent Rinterknecht, Valery Guillou, Didier Bourlès, Georges Aumaître, Karim Keddadouche**

**Coccolithophore productivity in the Southern Ocean over the deglaciations of the last 800.000 years - Margaux Brandon, Stéphanie Duchamp-Alphonse, Elisabeth Michel, Gulay Isguder, Amaelle Landais**

**Role of ocean circulation in carbon cycle changes during the last Deglaciation - Nathaelle Bouttes, Didier Roche, Fanny Lhardy, Aurélien Quiquet**

**Unravelling the forcings controlling the vegetation and Indian monsoon during the last glacial period ~28-75 ka - Coralie Zorzi, Stéphanie Desprat, Krishnamurthy Anupama, Srinivasan Prasad, Philippe Martinez**

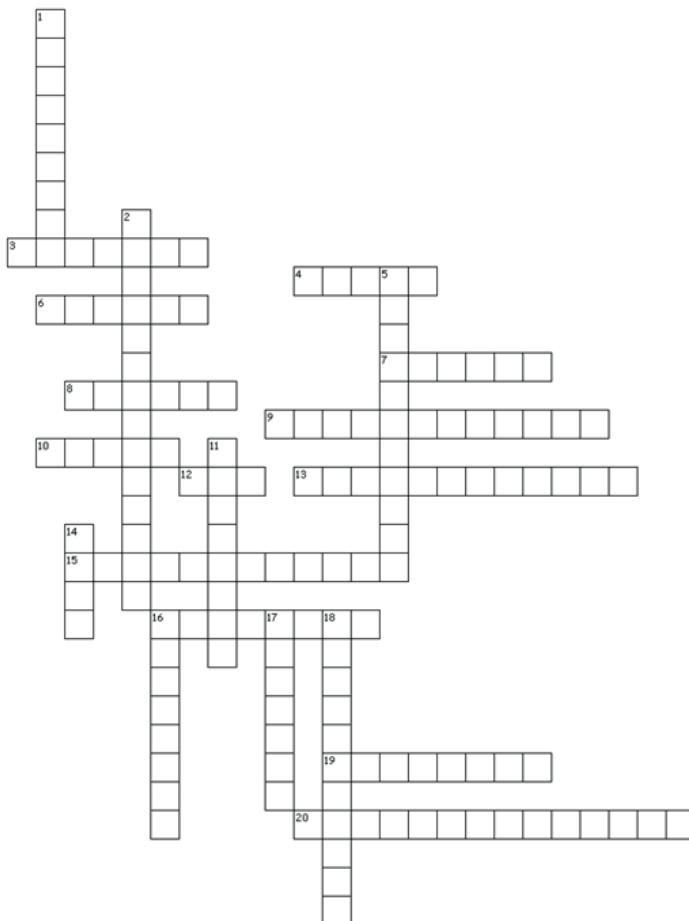
**Primary productivity dynamic in the northeastern Indian Ocean since the Last Glacial Maximum: toward a better understanding of tropical climate changes - Xinquan Zhou, Stéphanie Duchamp-Alphonse, Masa Kageyama, Luc Beaufort, Franck Bassinot, Christophe Colin**

## SESSION 8

**Evolution du cours de la Loire au Pléistocène, et relation avec la géodynamique et les premiers peuplements humains du Bassin parisien - Iale Serin--Tuikalepa, Hélène Tissoux, Pierre Voinchet, Jean-Jacques Bahain**

**Impact of late Pliocene (3.2 Ma) and Pliocene/Pleistocene (3-2.5 Ma) glaciations on Tropical Africa: model/data comparison over hominins sites - Gilles Ramstein, Christophe Dumas, Doris Barboni, Rani Raj, Ning Tan, Emma Yule**

**Neanderthal ecological dynamics north of the Pyrenees and west of the Jura/Alps between MIS 5a and MIS 4 - William Banks, Marie-Hélène Moncel, Jean-Paul Raynal, Marlon Cobos, Daniel Romero-Alvarez, Jean-Philippe Faivre, Brad Gravina, Marie-Noëlle Woillez**



### HORIZONTAL

3. Premier président de l'AFEQ
4. Autant en emporte le vent
6. Antépénultième de Penck & Brückner
7. Code barre sédimentaire
8. Bio-indicateur volant
9. Presque indispensable mais instable
10. De l'eau et des bulles
12. Aïeul du paléosol
13. « You shall not pass » said the International Commission on Stratigraphy
15. Thermomètre pélagique ou benthique
16. Époque mouvementée
19. Quand il fait beau on y prend une bière et quand il fait nuit, une date OSL
20. Vieux Quaternaire « has been »

### VERTICAL

1. Mini crustacé
2. Glaciaire attardé
5. Carbonate souterrain
11. Bioméridéralisation aragonitique
14. Fondée en 1962
16. Professionnel de l'évènement
17. Archive tubulaire, aussi comestible
18. Période archéologique lissée

# QUATERNaire 12

PARIS 2020

## INVITED SPEAKERS

### Environmental impact of tropical volcanic eruptions, from local to global

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**Franck LAVIGNE**

Laboratoire de Géographie Physique - UMR 8591 (CNRS-Paris 1-UPEC), Meudon

Large volcanic eruptions reject a large amount of sulphur in the atmosphere that, as aerosols, stop part of the solar insolation, which leads to cool down the Earth surface during a few years. Thanks to sulphate preserved in polar ices, these eruptions are well dated. Their climatic impact is generally well documented by multiproxy palaeoenvironmental studies, written sources, or even direct observations in the case of the most recent as the Pinatubo in 1991. For the oldest times, some caution has to be taken regarding palaeoclimatic reconstruction if they are not coupled to numerical model involving precise data on the related eruption (localisation, height of the panache, quantity of sulphur rejected, etc.). However, most eruptions that occurred before the European colonisation in the tropical zone have no identified source yet, and their impact on global scale is thus likely to be underestimated.

This talk will (i) present a methodology to determine volcanoes related to large eruptions whose sources are not identified yet, (ii) discuss some very new results from Indonesia and Pacific and (iii) demonstrate that tropical eruptions of higher magnitude than during the Holocene occurred during the Pleistocene, which might have strongly influenced climate.

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### Heinrich Events and Stadials interdependencies: A conceptual model deduced from Pleistocene eolian deposits on the Canary Island

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**Hartmut HEINRICH**

0°E maritime consult, Germany

with contribution of Christopher Roettig and Dominik Faust (TU Dresden), Florian Ziemen and Uwe Mikolaiewicz (Max-Planck Institute of Meteorology, Hamburg) and of Christoph Schmidt (University of Bayreuth)

Periodic ice shield collapses, so-called Heinrich events, were accidentally discovered in the 1980ies during an environmental impact study on the potential dumping of nuclear waste in the Northeastern Atlantic. A set of eleven partly anoxic sandy layers between Termination 2 and Termination 1, six of them during the main Weichselian Glaciation, turned out to be the cause of abrupt oceanic as well as atmospheric climatic changes all over the globe. They mostly occurred during Stadials but their relationship to Stadials remain unclear.

The Canary Islands at the southeastern corner of the North Atlantic with their eolian deposits make them an ideal and sensitive place to study in detail the succession and related climatic consequences of a glacial oceanic cycle in a terrestrial environment directly where the meltwater had exited the North Atlantic Ocean. The eolian deposits are mainly sequences of a mixture of biogenic carbonate detritus from the islands' shelf area and variable amounts of dust from West Africa. Each sequence consists generally of three units in which the top unit has the by far highest dust content. The upper two units contain large amounts of land snail shells and Anthophora nests (earth wasps). A new assessment of published and unpublished information from Pleistocene eolian deposits of the Canary Islands Lanzarote and Fuerteventura, published model data about the behavior of the atmospheric polar jet stream during ice sheet collapses and new dates of ages from the top dust layers reveal that these layers formerly interpreted as soil formations turned out to be massive dust supplies during Heinrich Events. Thus, we conclude that each sequence is a succession of interstadial to stadial climatic conditions in which the top dust layer represents the coldest parts of a Stadial.

As it is the case in deep Northeast Atlantic sediments the change from Unit 2 to the top dust layer seems to be abrupt and thus, the deposition is not a continuous process. Unfortunately, the new results from the Canary Islands do not provide clarity on the genetic interdependence of Stadials and Heinrich Events. Since the early 1990ies, several mechanisms were proposed for the abrupt onsets of the collapses, e.g. ice sheet internal processes or ocean warming. In fact, there seems stronger evidence for an influence from (precessional) warming of the subtropical/tropical Atlantic Ocean. Such water -via the AMOC and beneath a low-density surface meltwater layer which covered the North Atlantic- approached the grounding lines of ice shields and may have triggered the collapses. The collapses then prepared ocean and atmosphere for the subsequent Interstadial. The actual anthropogenic ocean warming and its effects on marine terminations of glaciers and on ice shelves one presently observes along the Arctic and Antarctic supposedly is the same mechanism that lead to the collapses during the past Glacials. If so, collapses of the today existing polar ice shields or parts of them somewhere in the future seem already unavoidable.

## GENERAL INFORMATIONS

Venue and acces informations to the colloque and to the gala dinner are given on the back cover

The abstract book is available as a pdf document on the colloque website: <https://q12-jjg.sciencesconf.org/>

### POSTERS

Posters are displayed on the day of the related session in Room 100, ground floor (on the right of the welcome desk). Please, come and hang them in the morning, during the first coffee break at last. Organisation members will be here for help.

Do not forget your poster at the end of the day ! Abandoned posters will be kept at the welcome desk till Q12 closure (i.e. Wednesday, 5<sup>th</sup>, 6p.m.) then unfortunately destroyed.

### PARTNER STALLS

The AFEQ-CNF INQUA and some partners will be present on exhibition stalls in the poster room (Room 100). Come and visit them!



**Don't miss the new AFEQ-CNF INQUA T-shirts on sale at the stall of the association!**

Memberships to the AFEQ-CNF INQUA for 2020 and *Quaternaire* subscriptions can also be paid on the spot.

### COFFEE BREAKS

Two coffee breaks are served every day in the 'foyer' (groundfloor) according at time given in the programme. As this room is not supposed to welcome more than 90 people at once, please take your coffee and croissant away!

**Be green and use your Q12-JJG coffee mug!**

### LUNCH BREAKS

The registration to Q12 includes lunch meals for all attendees. They are served in 2 rounds (12:30-13:15 and 13:15-14:00) in the 'foyer' (ground floor). As this room is not supposed to welcome more than 90 people at once, please respect the time marked on the ticket you received at the welcome desk.

**While you wait for your turn or after lunch, don't miss the poster sessions on room 100!**

### GALA DINNER

To join us at the Gala Dinner on Tuesday, you need to have booked for it and have a ticket to prove it (received at the welcome desk). A few tickets are still available and on sale at the AFEQ-CNF INQUA stall (40€).

It is a 40-45 min journey to go the 'Les Belles Plantes' restaurant: use metroline 12 then change for metroline 10 at *Sèvres-Babylone* and stop at *Jussieu*. Group departures will be organised from the Centre des colloques between 18:00 and 18:15: meet us at the main entrance of the building.

### URBAN FIELD TRIP

Thursday 6 February, 9:30-12:00 - **Geomorphology, archaeology and risks along the Seine** (Emmanuèle Gautier et Christine Chaussé). Free and open to all attendees to Q12 and/or the JJG.

**Meeting point at the station Cour Saint-Emilion** (metroline 14). Bring 2 metro tickets, warm clothes and umbrellas (depending on the weather).

Site 1 - Bercy: palaeoenvironments and past societies; modern and past docks.

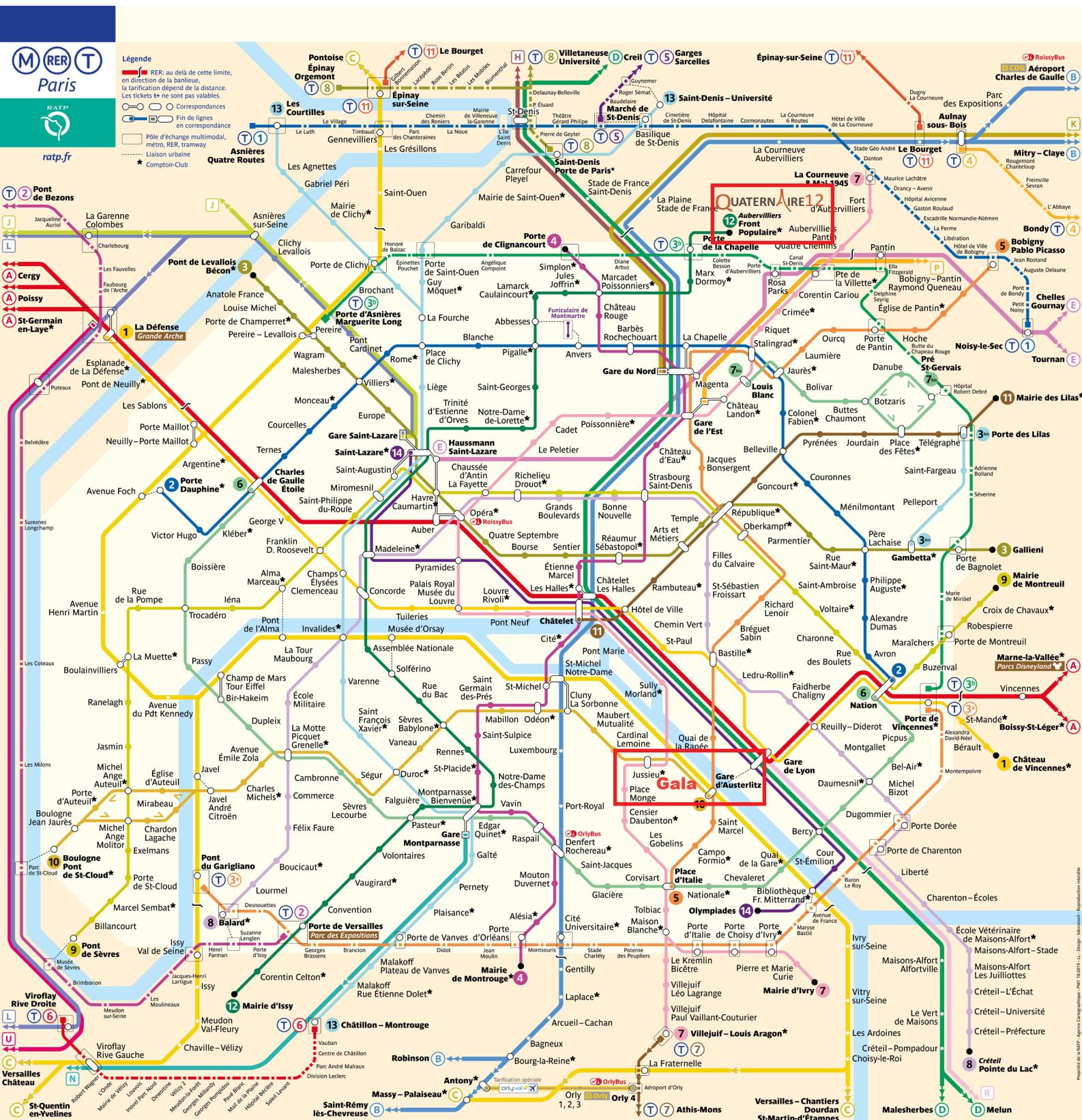
Metro journey to the station Louvre-Rivoli

Site 2 - The Seine left riverbank: flooding risks and redevelopment of the quays.

**Please, leave your badge at the end of the conference  
in the recycling box at the welcome desk so they could be re-used or recycled!**

# QUATERNaire 12

PARIS 2020



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<https://citymapper.com/paris>

# QUATERNaire 12

PARIS 2020

## ORGANISATION

Laboratoire de Géographie Physique, UMR 8591, Meudon

Julie DABKOWSKI, Yohan CHABOT & Aline GARNIER

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## Venue/Access

### Centre de colloques, Campus Condorcet

10 rue des fillettes, 93300 Aubervilliers

Metroline

(M) 12 Front Populaire station (Exit 2 George-Sand)

### Buses

139 239 Métallurgie stop

512 Front Populaire stop

302 Encyclopédie - Métallurgie stop

## Gala Dinner

### Restaurant 'Les Belles Plantes'

47 rue Cuvier, 75005 Paris



Jussieu station

## More information

Website: [q12-jjg.sciencesconf.org](http://q12-jjg.sciencesconf.org) / Contact: [quaternaire12\\_paris@groupes.renater.fr](mailto:quaternaire12_paris@groupes.renater.fr)



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