



## **Migrations climatiques : passé, présent, futur** *Climate Migrations: Past, Present, Future*

Journée d'étude internationale  
*International Conference*  
University of Chicago – Center in Paris  
21 septembre 2021  
*September 21, 2021*

Coordinateurs / *Conveners*:

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### **A. Présentation générale / *General presentation***

- Version française :

Si les migrations environnementales font l'objet d'un intérêt croissant depuis les années 1980, l'urgence climatique a suscité, ces dernières années, de plus en plus de travaux sur le sujet, et en particulier sur les migrations climatiques. Celles-ci peuvent être définies comme les mouvements de personnes ou de groupes causés à titre principal par des facteurs liés à une modification soudaine ou progressive de l'environnement à raison du changement climatique (Traoré Chazalnoël & Ionesco, 2016). Cependant, quoique les sciences du climat d'un côté et les sciences humaines et sociales de l'autre s'attellent à approfondir les connaissances sur le sujet, la "consilience" transdisciplinaire (Slingerland & Collard, 2012) entre les premières et les secondes reste rare et méthodologiquement difficile (Izdebski *et al.*, 2016).

À cette séparation entre champs d'analyse s'ajoute une géographie déséquilibrée de la recherche sur les migrations climatiques. Bien que le dernier rapport du GIEC y consacre un chapitre entier, elles font l'objet d'un désintérêt relatif dans les pays développés, à la différence des pays du Sud où les chercheurs s'emparent davantage du sujet alors même que les sciences du climat y sont moins présentes. Il s'agirait là d'un effet non seulement du "biais sédentaire" (Bakewell, 2008) qui conduit à traiter la migration comme une anomalie, mais également d'un prisme postcolonial reléguant à l'arrière-plan une question perçue comme l'apanage du monde en développement (Piguet, Kaenzig, Guélat, 2018).

Dans ce contexte, il apparaît aujourd'hui indispensable de structurer le dialogue savant autour des migrations climatiques. Dans le prolongement d'initiatives ayant permis d'amorcer la réflexion transdisciplinaire, tels une table-ronde en marge de la COP 21 en 2015, un colloque tenu au Collège de France la même année (Beau & Larrère, 2018), un atelier à l'université Yale en novembre 2019 ou encore un séminaire conjoint de l'ENS et du Centre Alexandre-Koyré en 2019-2020, la manifestation proposée vise à rassembler des spécialistes issus d'horizons scientifiques multiples, afin de s'affranchir des mythes qui entravent la connaissance de cet objet d'étude (Boas *et al.*, 2019) et d'identifier ensemble de nouvelles pistes de recherches intégratives, et non pas seulement additives (Roy *et al.*, 2013). L'objectif est de mieux comprendre, mieux anticiper et mieux agir sur les manifestations futures du phénomène que constituent les migrations climatiques.

Pour ce faire, c'est premièrement l'analyse du passé, tant celui des sociétés que des climats eux-mêmes, qui doit être au cœur de la démarche collective des chercheurs. En tirant parti des connaissances et les outils des sciences dures, l'histoire et ses disciplines auxiliaires comme l'archéologie doivent prendre toute leur part dans les recherches sur l'attribution climatique des migrations humaines, un défi scientifique qui ne peut être dissocié de celui tenant à l'attribution, par les climatologues, des épisodes climatiques singuliers au changement global (McCormick, 2019). Pour élucider ces chaînes de causalité complexes, il est nécessaire de les situer dans les contextes politiques, économiques, sociaux et culturels qui sont les leurs, sans négliger les marges de manœuvre des migrants eux-mêmes (Armiero & Tucker, 2017 ; Degroot *et al.*, 2021).

La spatialisation constitue le second volet de la réflexion commune. À la nécessité de transposer, en sciences du climat, les conséquences de changements globaux à l'échelle locale (IPCC, 2014), font écho des travaux novateurs en anthropologie, en géographie et en socio-économie qui témoignent de la diversité spatiale des migrations climatiques et de leurs représentations, rétives aux déterminismes englobants (McLeman, 2014; Cometti, 2015; Cattaneo *et al.*, 2019). La sociologie et les sciences comportementales se penchent de plus en plus, pour leur part, sur les processus de décision qui conduisent les acteurs à privilégier la migration climatique comme option d'adaptation (Klinenberg, Araos, Koslov, 2020), en accordant une attention particulière aux dynamiques différenciées de vulnérabilité en fonction des individus et des groupes (Erwin *et al.*, 2021).

La troisième perspective à prendre en considération est le futur des migrations climatiques. Un futur que l'analyse climatique, aussi fine soit-elle, ne saurait suffire à prévoir en l'absence de modèles sociaux, politiques et économiques de l'écheveau climat-migrations (Gemenne & Blocher, 2017). Dans ces modèles, les enjeux de santé publique nécessitent d'être intégrés à l'analyse prédictive, à plus forte raison compte tenu de l'expérience de la pandémie actuelle (Schwerdtle *et al.*, 2020). Anticiper l'avenir des migrations climatiques passe également par la reconnaissance et la garantie des droits des migrants climatiques, enjeu politique et juridique de premier ordre (Cournil & Mayer,

2014) dont dépendront largement les politiques publiques mises en œuvre aux différents niveaux de l'action collective.

Aujourd'hui, les migrations climatiques font l'objet de questionnements de plus en plus nombreux, dans le monde scientifique comme dans le débat public. En s'attachant à mieux comprendre leur complexité tout en tâchant d'identifier des leviers d'action concrets, cette journée d'étude transdisciplinaire à l'University of Chicago Center in Paris marquera une étape importante dans la prise en compte du phénomène.

- *English version:*

*Though interest in environmental migration has grown steadily since the 1980s, the climate emergency has established climate migration as a major subject of research. This type of migration can be defined as movements by individuals or groups which are mainly caused by factors related to a sudden or progressive environmental alteration due to climate change (Traoré Chazalnoël & Ionesco, 2016). Both climate science on the one hand, and humanities and social sciences on the other, are now deepening our collective understanding of climate migration. And yet transdisciplinary "consilience" (Slingerland & Collard, 2012) between those two domains of knowledge remains rare and, indeed, presents major methodological challenges (Izdebski et al., 2016).*

*In addition to the gulf between disciplines, climate migration research is hampered by a geographical imbalance. Although the last IPCC report contained a full chapter devoted to the topic, it is relatively neglected in developed countries. This stands in stark contrast to the Global South where, even though climate science is far less prominent, researchers have proven themselves far more keen to investigate the phenomenon. This may not only be an effect of the "sedentary bias" (Bakewell, 2008), which encourages us to think of migration as an anomaly, but also the result of a postcolonial paradigm which downgrades subjects that are perceived as the prerogative of the developing world (Piguet, Kaenzig, Guélat, 2018).*

*In this context, it is urgent to buttress our scientific dialogue around climate migration. Building on previous initiatives that have set this discussion in motion, such as a round-table on the fringes of COP21 in 2015, a conference at the Collège de France that same year (Beau & Larrère, 2018), a workshop at Yale University in November 2019 and a joint seminar of the ENS and the Alexandre-Koyré center in 2019-2020, the proposed event will gather scholars from a variety of disciplinary backgrounds in order to debunk the pervasive myths that still impede the understanding of climate migration (Boas et al., 2019). Through this effort, scholars will both refine their current models, as well as establish new, integrative avenues of research (Roy et al., 2013). The goal is to better understand, better anticipate and better act upon future materializations of the climate migration phenomenon.*

*To that end, the first step will be to analyze the past, both that of societies and that of the climate itself. Drawing on insights and methods from the hard sciences, history and its auxiliary disciplines*

*such as archaeology must play a central part in addressing the multifaceted impact of climate on migration. This challenge cannot be disjoined from the one that scientists are facing judging how to attribute singular climatic episodes to global change (McCormick, 2019). To shed light on those complex causal chains, it is necessary to situate them in their political, economic, social and cultural contexts, while at the same time paying due attention to the agency of migrants themselves (Armiero & Tucker, 2017; Degroot et al., 2021).*

*Spatialization is the second dimension of the collective effort around climate migration. Echoing the need in climate science to transpose the consequences of global changes down to the local scale (IPCC, 2014), new works in anthropology, geography and socio-economics bear witness to the spatial diversity of climate migration and its representations, which resist any all-encompassing determinism (McLeman, 2014; Cometti, 2015; Cattaneo et al., 2019). While taking account of the nuanced dynamics of vulnerability present in different individuals and groups (Erwin et al., 2021), sociology and the behavioral sciences have increasingly dealt with the decision processes that lead people to privilege climate migration as an adaptation option (Klinenberg, Araos & Koslov, 2020).*

*The future of climate migration will form the third pillar of this event. A future that climate analysis, as precise as it may be, cannot predict independent of the social, political and economic models of the climate-migration nexus (Gemenne & Blocher, 2017). Such models need to take public health parameters into account, especially given the current experience of the COVID-19 pandemic (Schwerdtle et al., 2020). The acknowledgement and safeguarding of the rights of climate migrants – itself a major political and legal challenge (Cournil & Mayer, 2014)– is also central to predicting the next stages of climate migration and will largely shape public policy at all levels of governance.*

*In both the scientific community and public debate, climate migration is an increasingly discussed and contentious topic. By confronting its complexity, while also trying to identify concrete courses of action, this transdisciplinary conference at the University of Chicago Center in Paris will be an important milestone in understanding this phenomenon.*

## REFERENCES

- Armiero, Marco, Tucker, Richard (eds.), 2017, *Environmental History of Modern Migrations*, Abingdon: Routledge.
- Bakewell, Oliver, 2008, “‘Keeping them in their place’: The ambivalent relationship between development and migration in Africa,” *Third World Quarterly* 29, 7, 1341–58.
- Beau, Rémi, Larrère, Catherine (eds.), 2018, *Penser l’Anthropocène*, Paris : Presses de Sciences Po.
- Boas, Ingrid *et al.*, 2019, “Climate migration myths,” *Nature Climate Change* 9, 901–903.
- Cattaneo, Cristina *et al.*, 2019, “Human migration in the era of climate change,” *Review of Environmental Economics and Policy* 13, 2, 189–206.
- Cometti, Geremia, 2015, *Lorsque le brouillard a cessé de nous écouter : changement climatique et migrations chez les Q’eros des Andes péruviennes*, Bern: Peter Lang.
- Cournil, Christel, Mayer, Benoît, 2014, *Les migrations environnementales. Enjeux et gouvernance*, Paris : Presses de Sciences Po.
- Degroot, Dagomar *et al.*, 2021, “Towards a rigorous understanding of societal responses to climate change,” *Nature* 591, 539–50.
- Erwin, Anna *et al.*, 2021, “Intersectionality shapes adaptation to social-ecological change,” *World Development* 138, 105282.
- Gemenne, François, Blocher, Julia, 2017, “How can migration serve adaptation to climate change? Challenges to fleshing out a policy ideal,” *The Geographical Journal* 183, 4, 336–47.
- Gray, Clark, Wise, Erika, 2016, “Country-specific effects of climate variability on human migration,” *Climate Change* 135, 3/4, 555–68.
- IPCC, 2014, *Climate Change 2014: Impacts, Adaptation, and Vulnerability, Part B: Regional Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change*, Cambridge: Cambridge University Press.
- Izdebski, Adam *et al.*, 2016, “Realising consilience: how better communication between archaeologists, historians and natural scientists can transform the study of past climate change in the Mediterranean,” *Quaternary Science Reviews* 136, 5–22.
- Kaczan, David, Orgill-Meyer, Jennifer, 2020, “The impact of climate change on migration: a synthesis of recent empirical insights,” *Climatic Change* 158, 281–300.
- Klinenberg, Eric, Araos, Malcolm, Koslov, Liz, 2020, “Sociology and the climate crisis,” *Annual Review of Sociology* 46, 649–69.
- McCormick, Michael, 2019, “Climates of history, histories of climate: from history to archaeoscience,” *The Journal of Interdisciplinary History* 50, 1, 3–30.
- McLeman, Robert, 2014, *Climate and Human Migration: Past Experiences, Future Challenges*, Cambridge: Cambridge University Press.
- Piguet, Étienne, Kaenzig, Raoul, Guélat, Jérémie, 2018, “The uneven geography of research on ‘environmental migration,’” *Population and Environment* 39, 357–83.
- Roy, Eric *et al.*, 2013, “The elusive pursuit of interdisciplinarity at the human-environment interface,” *BioScience* 63, 9, 745–53.
- Schwerdtle, Patricia *et al.* 2020, “Health and migration in the context of a changing climate: a systematic literature assessment,” *Environment Research Letter* 15, No. 10.
- Slingerland, Edward, Collard, Mark, 2012, *Creating Consilience: Integrating the Sciences and the Humanities*, Oxford: Oxford University Press.
- Traoré Chazalnoël, Mariam, Ionesco, Dina, 2016, “Defining climate migrants – beyond semantics,” IOM Blog.

## **B. Description de la journée / Description of activities**

La journée d'études dont il s'agit comprendra **quatre sessions formelles** (format table-ronde), suivies d'une **discussion conclusive** entre deux conférenciers principaux, l'un issu des sciences du climat (Valérie Masson-Delmotte), l'autre des sciences humaines et sociales des migrations (François Héran). Les sessions formelles, d'une durée de 75 minutes chacune, comprendront un modérateur-discutant et trois intervenants. Les interventions dureront 10 minutes, auront lieu en langue anglaise et s'appuieront sur des éléments pré-diffusés, afin de favoriser l'interaction entre les participants. À l'issue de la journée, un moment de convivialité autour d'un buffet sera proposé aux participants.

*The conference in question will comprise four formal sessions (round-table format), followed by a final conversation between two keynote speakers, one from the climate sciences (Valérie Masson-Delmotte) and the other from migration studies (François Héran). The formal sessions will last 75 minutes each, and have one chair-discussant and three panelists. The 10-minute individual presentations will be delivered in English and will be based upon pre-circulated papers, to foster interaction between participants. At the end of the conference, an informal gathering over snacks and drinks will be offered to participants.*

En raison du contexte sanitaire et en vue de limiter le bilan carbone de la journée d'étude, l'organisation a fait le choix de n'inviter à y participer physiquement que les intervenants affiliés aux institutions de recherche les moins éloignées géographiquement. Les autres intervenants participeront par vidéoconférence, exception faite de ceux qui indiqueraient avoir déjà prévu d'être présents en France pour un séjour de recherche à la période concernée.

*Due to the ongoing pandemic-related challenges and with a view to limit the conference's carbon footprint, the organizers have decided to only extend invitations to physically participate to speakers affiliated with not too distant research centers. All other speakers will be taking part via videoconference. An exception will be made for those who already have a trip to France scheduled at the same period.*

## C. Programme détaillé / Detailed schedule

- 11:15 Accueil des participants. Mot de bienvenue par Pierre Sepulchre et Fabrice Langrognet. *Greeting of participants. Welcome words.*
- 11:30-12:45 Première session : “Définir les migrations climatiques”.  
*First session: “Define Climate Migrations.”*
- Modératrice/Chair: **Catherine Larrère**, Université Paris 1-Panthéon Sorbonne, France.
- Intervenants/Speakers:  
**Emnet Berhanu Gebre**, IOM: “*Framing Climate Migration: Casting Light On The Legal and Political Stakes.*”  
**Robert McLeman**, Wilfrid-Laurier University, Waterloo, Canada: “*Human Migration in a Changing Climate: Legal, Political and Practical Considerations.*”  
**Jochem Marotzke**, Max Planck Institute for Meteorology, Hamburg, Germany: “*Climate Change, Climate Variability, and Migration.*”
- 12:45-14:15 Pause-déjeuner / *Lunch break.*
- 14:15-15:30 Deuxième session: “Les migrations climatiques dans le temps”.  
*Second session: “Climate Migrations Across Time.”*
- Modératrice/Chair: **Lamy Khalidi**, CNRS, France.
- Intervenants/Speakers:  
**Elena Xoplaki**, Justus Liebig University, Giessen, Germany: “*Climate Variations and The Migration of The Turkoman Nomads.*”  
**Heli Huhtamaa**, University of Bern, Switzerland: “*Climate, Mobility, and Migration in History: Perspectives from Northern Europe.*”  
**Ingrid Boas**, Wageningen University, Netherlands: “*Climate Change and Digitalisation Reshaping Practices of Mobility: The Case of Pastoralism in The Kenyan Laikipia Highlands.*”
- 15:30-15:45 Pause / *Break.*
- 15:45-17:00 Troisième session: “Les migrations climatiques dans l’espace”.  
*Third session: “Climate Migrations Across Space.”*
- Modérateur/Chair: **François Gemenne**, Université de Liège, Belgium/Sciences Po, France.
- Intervenants/Speakers:  
**Hélène Benveniste**, Harvard University, USA: “*Migration, Exposure to Climate Change, and Immobility.*”

**Geremia Cometti**, Université de Strasbourg, France: “*The Importance of An Anthropological Approach to Analyze The Nexus Between Migration and Climate Change.*”

**Katrin Millock**, CNRS/Paris School of Economics, France: “*Gendered Migration Responses to Extreme Climate Events.*”

17:00-17:15

Pause / *Break.*

17:15-18:30

Quatrième session: “L’avenir des migrations climatiques”.  
*Fourth session: “The Future of Climate Migrations.”*

Modérateur/*Chair*: **Serge Janicot**, IRD, France.

**Alassane Diallo**, Université Amadou Mahtar Mbow, Dakar, Sénégal:  
“*Adaptation to Climate Change Through Migration as a Factor of Sustainable Development in Developing Countries.*”

**Dina Ionesco**, IOM, Geneva: “*The Two Sides of The Coin: Integrating Climate Dimensions Into Migration Policies and Practice and Migration Dimensions Into The Climate Agenda.*”

**Lori Hunter**, University of Colorado Boulder, USA: “*Migration-Environment Research: Remaining Puzzles and Promising Approaches.*”

18:30-18:45

Pause / *Break.*

18:45-19:15

Discussion conclusive animée par les coordinateurs. *Keynote conversation, moderated by the conveners.*

Conférenciers principaux/*Keynote Speakers*:

**Valérie Masson-Delmotte**, CNRS, France.

**François Héran**, Collège de France/Institut Convergences Migrations, France.

19:15-20:30

Buffet / *Reception.*



## **D. Information sur les participants / Information on participants**

### 1) Intervenants/*Speakers*:

#### Table-ronde n° 1/*Roundtable No. 1*:

##### **• Catherine Larrère**

Dr. Catherine Larrère is a philosopher and professor emerita at the University Paris 1 Panthéon-Sorbonne. A specialist in political philosophy, she has been working on environmental issues since the 1990s (nature conservation, technological risks, environmental justice, political ecology and democracy). She headed the philosophy faculty at the University of Bordeaux-Montaigne from 1992 to 1997, and joined the University of Paris 1 in 2004. Her latest publications with Raphaël Larrère include *Penser et agir avec la nature, une enquête philosophique* (2015), *Les inégalités environnementales* (2017) and *Le pire n'est pas certain, Essai sur l'aveuglement catastrophiste* (2020). She also co-edited *Penser l'anthropocène* (2018) with Rémi Beau. From 2013 to 2016, Catherine Larrère chaired a think tank called *Fondation de l'écologie politique*.

##### **• Emnet Berhanu Gebre**

Dr. Emnet Berhanu Gebre is a researcher and an international consultant in the field of migration, focusing notably on migrant protection and assistance issues for the International Organisation for Migration (Morocco, Ethiopia and Somalia). Her PhD thesis in Public Law at the University of Toulouse Capitole (2016) focused on the international protection of persons displaced by climate change. Her publications notably pertain to protection issues raised by environmental displacement and climate change litigation.

##### **• Robert McLeman**

Dr. Robert McLeman is Professor of Geography & Environmental Studies at Wilfrid Laurier University in Waterloo, Canada. His research focuses on how environmental change affects population patterns and community wellbeing, and has been published widely in books, scholarly journals and popular media. He has advised the World Bank, OECD, numerous UN agencies, and governments in North America and Europe on the implications of climate change for global migration patterns and security. Professor McLeman is also a Coordinating Lead Author for the Intergovernmental Panel on Climate Change Sixth Assessment report on vulnerability and adaptation, where he and his team of international scientists are responsible for assessing climate change impacts on human health, wellbeing, migration and conflict.

##### **• Jochem Marotzke**

Dr. Jochem Marotzke is a Director at the Max Planck Institute for Meteorology in Hamburg, Germany, where he heads the department "The Ocean in the Earth System." He is also a Honorary Professor at the University of Hamburg. His research interests focus on climate variability and climate change, and particularly on the role of the oceans. He has used economic experiments to investigate whether humans are willing to use their own money for climate protection. One of these experiments was framed as the interaction of climate change mitigation, climate migration, and poverty. Jochem Marotzke received his Ph.D. in Physical Oceanography from the University of Kiel, Germany, in 1990. He then moved to the Massachusetts Institute of Technology, where he taught Physical Oceanography and Climate Dynamics. In 1999, he was appointed Professor of Physical Oceanography at the Southampton Oceanography Centre, UK. While in Southampton, he initiated

and led the establishment of the first continuous monitoring system of the Atlantic Meridional Overturning Circulation at 26°N, commonly known as the “Gulf Stream”. He moved to Hamburg in 2003. He and his group developed one of the first systems for multi-year climate forecasting; this system is now used operationally by the German meteorological service. Jochem Marotzke was a Coordinating Lead Author of both the Fifth and Sixth Assessment Reports of the Intergovernmental Panel on Climate Change (IPCC), published in 2013 and due out this summer, respectively. He is member of the National Academy of Sciences Leopoldina and of the National Academy of Science and Engineering (acatech). In 2009 he received the Fridtjof Nansen Medal of the European Geosciences Union.

Table-ronde n° 2/*Roundtable No. 2:*

• **Lamya Khalidi**

Dr. Lamya Khalidi is an archaeologist of the prehistory of Arabia, East Africa and the Near East. She was awarded a doctorate in 2006 from the University of Cambridge for the thesis “Settlement, Culture-Contact and Interaction along the Red Sea Coastal Plain, Yemen: The Tihamah cultural landscape in the late prehistoric period (3000-900 BC)”. Since 2012 she is a permanent researcher at the French Centre National de la Recherche Scientifique (CNRS) and is based at the laboratory CEPAM in Nice, France. Before joining the CNRS, she taught archaeology and supervised students at a number of international universities including Cambridge University, the University of Louisville and the American University of Beirut and has been active in archaeological field training throughout her career, including with the GOAM in Yemen and the ARCCH in Ethiopia. She has directed and carried out fieldwork across the Middle East and Africa on sites ranging from the Early Paleolithic to the Islamic period (Yemen, Syria, Lebanon, Jordan, Oman, Sudan, Eritrea, Ethiopia) and has been a long-time team member and stone tool specialist at excavations at the sites of Tell Brak, Tell Hamoukar and Tell Chagar Bazar in Syria, the site of Tell Labwe in Lebanon, the Kadruka Project in Sudan and the Gobero Project in Niger to name a few. For the last 10 years, her fieldwork and research has focused primarily on the Horn of Africa and specifically on projects in Ethiopia, Djibouti and Sudan. She has been carrying out archaeological fieldwork in Ethiopia with the Late Stone Age Sequence in Ethiopia Project since 2010, with the PSPCA project in Djibouti since 2014, and with the TelluS-Rift project since 2017, and she directs the VAPOR-Afar project in Ethiopia since 2014.

• **Elena Xoplaki**

Dr. Elena Xoplaki is a climate scientist currently Acting Head of the Climatology, Climate Dynamics and Climate Change Research Group at Justus Liebig University Giessen. Her expertise is on climate variability and change in the past, present and future with spatial focus on the greater Mediterranean area. She conducts multi- and interdisciplinary research and promotes collaboration between the humanities and social sciences and the natural sciences on an international level. Dr Xoplaki is a member of the MedECC Steering Group awarded the 2020 North-South Prize Council of Europe’s , a member of the Princeton Climate Change and History Research Initiative, co-leader of the ANSO Association for Trans-Eurasia Exchange and Silk-Road Civilization Development (ATES) WG5 on Silk Road Civilization and Environment and vice-chair of the ITU/WMO/UNEP Focus Group on AI for Natural Disaster Management. With outstanding number and quality of international collaborations, she has demonstrated ability to work on several timely topics and funded projects addressing from climate extremes and processes understanding to climate services and impacts on agriculture and energy resources.

• **Heli Huhtamaa**

Dr. Heli Huhtamaa has a PhD in History from the University of Eastern Finland and a PhD of Science in Climate Sciences from the University of Bern, Switzerland (both received in 2017). She is exploring the relationships between human societies and climate in the past, investigating how climatic changes have influenced human well-being and livelihoods on the one hand, and how humans have adapted to past climatic variability on the other. Her research focuses mostly on the Nordic countries and North-East Europe, from the Middle Ages to the 19th century. Huhtamaa is currently working at the Institute of History and the Oeschger Centre for Climate Change Research, University of Bern, Switzerland.

• **Ingrid Boas**

Dr. Ingrid Boas is an associate professor at the Environmental Policy Group of Wageningen University and was recently a fellow with the Migration Policy Centre at the European University Institute. Ingrid does research in the fields of environmental change, mobilities, and governance, with a focus on environmental/climate change-related human mobility and its intersection with digital technologies. In 2016, she was awarded a personal (Veni) grant with the Netherlands Scientific Organization to study environmental migration in the digital age, focusing on the cases of Bangladesh and Kenya. This project examines the role of digital practices and ICT-enabled information exchange in shaping decisions to move or stay in the context of environmental and climate change. Ingrid's work has appeared in journals such as *Global Environmental Politics*, *Environmental Politics*, *Geoforum*, the *Journal of Ethnic and Migration Studies*, *Nature Climate Change*, and in the monograph (Routledge, 2015) on *Climate migration and security: Securitization as a strategy in climate change politics*.

Table-ronde n° 3/*Roundtable No. 3:*

• **François Gemenne**

Dr. François Gemenne is a FNRS senior research associate at the University of Liège, Belgium, where he is the Director of the Hugo Observatory. He also serves as co-director of the Observatory on Defence and Climate of the French Ministry of Defence. He lectures on environmental and migration policies in various universities, including Sciences Po (Paris and Grenoble) and the Free University of Brussels, where he holds the Bernheim Chair on Peace and Citizenship. His research deals mostly with environmental and migration governance. He has worked in particular with populations displaced by environmental changes, including natural disasters, and the policies of adaptation to climate change. He has conducted field studies in New Orleans after hurricane Katrina, Tuvalu, China, Kyrgyzstan, the Maldives, Mauritius and Japan, after the Fukushima disaster.

• **Hélène Benveniste**

Dr. Hélène Benveniste is a specialist in environmental policy and currently postdoctoral Environmental Fellow at the Harvard University Center for the Environment. Her research focuses on two broad topics: human migration and inequality in the context of climate change, and global governance of environmental issues. In her work, she uses both quantitative methods drawn from environmental studies, economics, and demography, and qualitative methods grounded in political science. She received her PhD in Science, Technology, and Environmental Policy from Princeton University's School of Public and International Affairs and earned an MS in Science and Executive Engineering from Mines Paristech. She previously was a visiting researcher at UC Berkeley's Energy and Resources Group, at the International Institute for Applied Systems Analysis, and at the National

Center for Atmospheric Research. During the Paris Agreement year, she served as research scientist and project manager of a scientific advisory group to the French climate negotiation team, focusing on assessing countries' Nationally Determined Contributions. As part of her career in energy and climate policy prior to graduate school, she also served as deputy attaché for energy at the French Embassy in Germany. Her research has been published in various journals, including Proceedings of the National Academy of Sciences and Environmental Research Letters.

• **Geremia Cometti**

Dr. Geremia Cometti is Lecturer (*maître de conférences*) in anthropology and director of the Anthropology Department at the University of Strasbourg, France. Before joining the University of Strasbourg he was a Swiss National Science Foundation (SNSF) Fellow at the Laboratoire d'Anthropologie Sociale in Paris and then at the UCL Institute of Advanced Studies (IAS) and the Centre for the Anthropology of Sustainability (CAOS) within UCL Anthropology Department. He holds a PhD in Anthropology of Development from the Graduate Institute in Geneva. Through several ethnographic fieldworks with the Q'eros of the Peruvian Andes, Geremia Cometti has explored how non-Western societies make sense of climate change.

• **Katrin Millock**

Dr. Katrin Millock is Senior Research Fellow in economics of the French National Center for Scientific Research (CNRS) and Associate Professor at Paris School of Economics. She holds a PhD in Agricultural and Resource Economics from the University of California, Berkeley, and is a specialist in environmental and resource economics. Her research addresses both theoretical and empirical aspects of environmental economics and she has contributed to evidence-based policy assessments for the French Ministry of Environment and the OECD, amongst other institutions. Her current research focuses on climate change and development, in particular climate-induced migration.

Table-ronde n° 4/*Roundtable No. 4:*

• **Serge Janicot**

Dr. Serge Janicot is a climate senior scientist at IRD (Institute of Research for Development). He worked at Météo-France and then at the CNRS (Centre National de la Recherche Scientifique) before joining the IRD at Sorbonne University (Laboratory LOCEAN) in Paris, France. He is conducting research on climate variability in sub-Saharan Africa, and more recently on the detection of climate change and its impacts on agriculture and health. He has published over hundred peer-reviewed articles in international journals, has co-produced a dozen books, and supervised about twenty doctoral and post-doctoral students. He has been one of the main bearers of the AMMA programme (African Monsoon Multidisciplinary Analysis; 2002-2020), a programme recognized by the international community as the flagship scientific programme in Africa on the African monsoon, its variability and societal impacts. On the occasion of COP21, he coordinated the book published by IRD "Climate change: what challenges for the South?" on the activities of its researchers on climate change in the South, its impacts and adaptation solutions. He also wrote the chapter of SDG13, "Facing Climate Change", for the book published by IRD "Regards croisés sur les Objectifs du Développement Durable". He recently led an ANR-funded project on the establishment of a heatwave warning system in the Sahel, with the meteorological agencies of Senegal and Burkina Faso, among other partners. In the emerging context of "climate services" supported by the World Meteorological Organization, he is co-leading an IRD's program "climatic hazards, risks and climate services" and has participated in the implementation of a demonstrator in Senegal with the support of the French

Development Agency and the Ministry of Ecological and Solidarity Transition. He has been a member of numerous national and international scientific committees.

• **Alassane Diallo**

Dr. Alassane Diallo is Associate Professor at Université Amadou Mahtar Mbow (UAM) in Dakar, Sénégal, where he is affiliated to the Haute École d'économie et de gestion. He is also an associate researcher at Centre de recherche en économie de Grenoble, France, where he received his PhD in Economics in 2018. His doctoral dissertation was entitled “Climate Change and Human Migrations in Senegal: A Vulnerability-Based Approach to The Socio-Ecological System” (“*Changement climatique et migrations humaines au Sénégal : une approche en termes de vulnérabilité du système socio-écologique*”). His research interests are migration studies, economics of climate change, development economics, sustainable development, and econometrics. Dr. Diallo’s geographical areas of expertise are Subsaharan Africa, Sahel and Senegal.

• **Dina Ionesco**

Dina Ionesco is the Head of the Migration, Environment and Climate Change (MECC) Division at the International Organization for Migration, i.e. the UN Migration Agency. In this capacity, she oversees since 2015 IOM’s policies and programs related to the nexus between migration, environment and climate change and coordinates IOM’s contributions to policy processes, such as the climate change negotiations. She is the co-author of the *Atlas of Environmental Migration* (2016) and of numerous articles and publications. Before joining IOM, Dina Ionesco worked for the Organisation for Economic Co-operation and Development (OECD) on local development policies, with European Dialogue and NGOs on human rights, with UK academia and as an independent coach writer.

• **Lori Hunter**

Dr. Lori Hunter is Professor of Sociology and Faculty Research Associate in the Institute of Behavioral Science’s Research Programs on Environment & Society at the University of Colorado, Boulder. She is Associate Director of the University’s Population Center which facilitates research on three signature themes: Migration, Health, and Population-Environment interactions. Dr. Hunter’s research and teaching focus on human-environment interactions, with specific examinations of migration and climate change connections, particularly in the context of natural resource-dependent rural livelihoods across the globe. Hunter’s recent work has also examined natural resource use as coping strategy among HIV/AIDS-impacted households in rural South Africa.

2) Conférenciers principaux/*Keynote speakers*:

• **Valérie Masson-Delmotte**

Dr. Valérie Masson-Delmotte is a leading French climate scientist and Research Director at the Climate and Environment Sciences Laboratory (LSCE) of the French Alternative Energies and Atomic Energy Commission (*Commissariat à l'énergie atomique et aux énergies alternatives*, CEA). In her work, Masson-Delmotte uses data from past climates, including water vapour, ice cores, and tree rings, to test models of the current climate change. She has an interdisciplinary profile in isotopic geochemistry, glaciology, climate modelling and paleoclimatology. In 2015, she became co-chair of the International Panel on Climate Change (IPCC) Working Group I (WG I), also known as the Physical Science Basis working group. WG I aims at assessing the physical scientific basis of the

climate system and climate change, including topics such as changes in greenhouse gases in the atmosphere, observed changes in temperatures, rainfall, glaciers, and sea level, and historical and paleoclimatic perspectives on climate change. In this role, Dr. Masson-Delmotte has contributed to several IPCC reports. Since 2018, she is also a member of the new national climate advisory council in France (*Haut Conseil pour le climat*), an independent expert body established to guide policy making. The council's first report, published in June 2019, clearly assesses the climate effects of different sectors in the French society and suggests a way forward for effective climate policy. Through her scientific contributions and roles in the IPCC and the climate advisory council, Ms. Masson-Delmotte is at the centre of climate research and policymaking in France and at the global level.

• **François Héran**

Dr. François Héran has been Professor at the Collège de France since 2018, where he is the first holder of the Migrations and Societies chair. He also heads Convergence Institute Migration (*Institut Convergences Migrations*), a pluridisciplinary institute associating CNRS, EHESS, EPHE, INED, INSERM, IRD and the University of Paris I in order to connect France-based scholars researching migration at all time periods and contexts. A philosopher and anthropologist by training, François Héran joined the National Institute for Demographic Studies (INED) and then the National Institute for Statistics and Economic Studies (INSEE). There, he led the division of demographic studies from 1993 to 1998, before returning to INED where he served as the Institute's director for more than a decade. From 2008 to 2012, François Héran chaired the *European Association for Population Studies*. From 2014 to 2016, he led the Humanities and Social Sciences department at the French National Research Agency (*Agence nationale de la recherche*). His research has covered a wide range of topics, from sociability, couple formation, families and education, language transmission, voters' turnout and immigration, as well as epistemological issues such as the historiography of social sciences and the relationship between sociology and philosophy.

3) Coordinateurs/*Conveners*:

• **Fabrice Langrognnet**

Dr. Fabrice Langrognnet is a lawyer and a historian of migration. After serving for five years as a senior judge in the administrative branch of the French judiciary, specializing in immigration and asylum cases, he completed in 2019 a PhD in migration history at the University of Cambridge, where he was a Gates scholar. He is now a Leverhulme fellow at the University of Oxford, where his research deals with refugee history, in particular asylum procedures in the 1980s. Fabrice is also an associate researcher at the Centre d'histoire sociale des mondes contemporains, a joint University of Paris 1/CNRS lab, where he is the co-leader of a research and exhibition project entitled "Migrants in ordinary housing: access, appropriation of domestic spaces and heritagization," funded by the Institut Convergences Migrations. In 2020-2021, Fabrice was a visiting research scholar and Fung Global Fellow at Princeton University. He is also a fellow at the Global Public Policy Institute, a Berlin-based think tank, and a member of the European Research network COST "Women on the Move." Before his PhD, Fabrice graduated from the École normale supérieure LSH, Sciences-Po, ÉNA and EHESS, all in France.

- **Pierre Sepulchre**

Dr. Pierre Sepulchre is a multidisciplinary scientist, exploring the links between climate change and biodiversity over long time scales through numerical modelling. Pierre holds a MSc in agronomy engineering (AgroParisTech) and a MSc in paleontology (University of Montpellier). After working at reconstructing past environments of Southeast Asia, Pierre completed a PhD in modelling past climates of Africa at the Laboratoire des Sciences du Climat et de l'Environnement (Institut Pierre-Simon-Laplace) and the University of Poitiers. After a two-year postdoc in the climate modelling group at UC Santa Cruz, Pierre was hired in 2010 as a full-time researcher at CNRS. His current project aims at understanding the links between paleogeography, climate changes and biodiversity through time, his core tool being numerical climate models. Recently, he expanded his activity towards history and sociological sciences, exploring the changes in the structuration of research in his own laboratory in the context of global climate change.