# SPEAKERS BIOGRAPHIES

# Guest speaker of the Plenary Conference

## FRANÇOIS GEMENNE

FNRS SENIOR RESEARCH ASSOCIATE AND  DIRECTOR OF THE HUGO OBSERVATORY
UNIVERSITY OF LIÈGE

François Gemenne is a specialist of environmental geopolitics and migration governance at the University of Liège, where he is a FNRS senior research associate and the Director of the Hugo Observatory. He also heads the Observatory on Defence and Climate of the French Ministry of Defence, jointly with Julia Tasse at IRIS. He is a lead author for the IPCC and he also lectures on climate change and migration policies in different universities, including Sciences Po and Sorbonne University in Paris.

His research deals mostly with environmental and migration governance. He has worked in particular on populations displaced by environmental changes and the policies of adaptation to climate change, as well as on asylum and migration policies. He has conducted field studies in New Orleans after hurricane Katrina, Tuvalu, China, Kyrgyzstan, the Maldives, Mauritius, as well as in Japan after the Fukushima disaster.

He holds a joint doctorate in political science from Sciences Po Paris and the University of Liege (Belgium). He also holds a Master's degree in Development, Environment and Societies from the University of Louvain, as well as a Master of Research in Political Science from the London School of Economics, where he also taught. In 2008, he was awarded a post-doctoral scholarship from the AXA Research Fund. He has published in leading journals, including Science and Global Environmental Change, and has authored several books, amongst which "The Anthropocene and the Global Environmental Crisis" (edited with C. Hamilton and C. Bonneuil, Routledge 2015) the Atlas of Environmental Migration (with D. Ionesco et D. Mokhnacheva, Routledge 2016) or Handbook of Environmental Displacement and Migration (edited with R. McLeman, Routledge 2018).

# MATHIEU FROMENTIN

### POLICY OFFICER, ECOLOGICAL AND SOCIAL TRANSITIONS UNIT
### DIRECTORATE-GENERAL FOR RESEARCH AND INNOVATION
### EUROPEAN COMMISSION

Mathieu Fromentin is policy officer at the European Commission's Directorate-General on Research & Innovation. His work covers transition analysis, as well as international cooperation and coordination efforts for the directorates Healthy Planet and Clean Planet. He graduated in political sciences at Sciences Po and at the College of Europe in Bruges, where he studied European Affairs. His work focused on energy and environment-related policies.

# ALEXANDER HASGALL

### HEAD OF THE EUA COUNCIL FOR DOCTORAL EDUCATION
### EUROPEAN UNIVERSITY ASSOCIATION

Alexander Hasgall is Head of the EUA Council for Doctoral Education (EUA-CDE). He is responsible for the largest European network in this field, covering 36 countries and bringing together a community of academic leaders and professionals from over 250 universities awarding doctoral degrees and institutions working on issues related to doctoral education and research training.
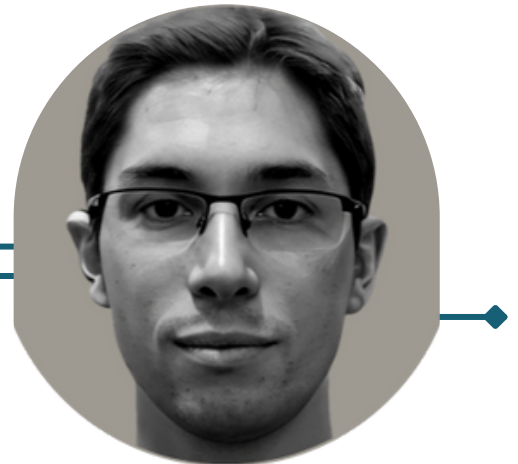
# LORIE HAMELIN

PROFESSOR
CHAIR ON SUSTAINABLE TRANSITIONS
TOWARDS LOW FOSSIL CARBON USE
INRAE, TOULOUSE

Lorie Hamelin, laureate of the 2017 French presidential climate call "Make our planet great again" (Project Cambioscop), heads a research team at the Federal University of Toulouse. Her research focuses on the environmental performance of strategies to transit towards a low fossil carbon economy, at national and regional scales. Counting with 14 years of research experience in Canada, Denmark, Poland and France, she developed early methods for life cycle assessments of land use changes, biogas & overall manure management systems (PhD 2013), headed 3 work packages of EU projects related to Life Cycle Assessments and is advisor to the Swedish Biogas Research Centre. She supervised 12 PhD students (6 on-going), 7 postdocs, and several M.Sc. projects.

# TANGUY FARDET

RESEARCH OFFICER
OCAPI PROGRAM
WATER, ENVIRONMENT AND URBAN SYSTEMS LABORATORY (LEESU)
ECOLE DES PONTS PARISTECH

Tanguy Fardet explores pathways to make agri-food ecosystems more circular and sustainable by improving usage of organic matter from urban areas within the OCAPI program. He considers how organic matter (from food residues to human urine and feces) may be converted into amendment and fertilizer to bring the nutrients they contain back to agricultural parcels. He uses modeling and graph analysis to investigate the logistics networks and the dynamics that could be associated to these resources. Within the OCAPI program, they work with members of the civil society to design and test actual implementations.

# THOMAS LAUVAUX

PROFESSOR JUNIOR CHAIR
ATMOSPHERIC AND MOLECULAR SPECTROSCOPY GROUP
UMR CNRS GSMA
UNIVERSITY OF REIMS CHAMPAGNE-ARDENNE

Thomas Lauvaux, chair professor at the University of Reims in climate sciences, develops monitoring systems based on atmospheric data to support climate policies at national and city scales. These systems combine atmospheric greenhouse gas measurements and numerical weather models to inform in real time how vegetation and human activities impact the carbon cycle.

# GWENAËL IMFELD

CNRS RESEARCH DIRECTOR
INSTITUT TERRE ET ENVIRONNEMENT DE STRASBOURG
UMR CNRS ITES, UNIVERSITÉ DE STRASBOURG - ENGEES

Gwenaël Imfeld is CNRS research director in environmental biogeochemistry at the Institut Terre et Environnemenrt of Strasbourg (ITES, UMR7063). He specializes in the transformation of pollutants and microbial ecology in continental hydrosystems. His research group focuses on the hydrology of contaminants at the scale of the agricultural watershed and the reactive transport of industrial solvents and micropollutants. Current projects use isotopic, hydrological and biomolecular approaches to understand the fate of pesticides in soils, rivers, wetlands and aquifers, at scales ranging from elementary processes understood in microcosms, laboratory experiments and field studies. He directs the Research Federation on Environment and Sustainability (FERED).

# GUILLAUME JUBEAUX

## CO-FOUNDER AND DIRECTOR
## BIOMAE

Guillaume Jubeaux has a classic university course (LMD) with a thesis at Irstea (Lyon-Villeurbanne ecotoxicology laboratory) between 2008 and 2012 on the development and use of vitellogenin measurement in gammarus (crustaceans from water) as a marker of endocrine disruption.

He then co-founded the Biomae laboratory in 2014 to promote the tools resulting from the research work of Irstea (now INRAE). Since then, he has been working on the operational and large-scale deployment of *in situ* bioassays based on the caging of gammarus for water agencies, local authorities and industrialists seeking to assess the chemical contamination and toxic impact of aquatic environments (in particular under the Directice Cadre Eau). He also participates in standardization projects for these methods (AFNOR, ISO) and the development of other applications in ecotoxicology.

# ANTHONY LEHMANN

## PROFESSOR
## ENVIROSPACE LAB
## INSTITUTE FOR ENVIRONMENTAL SCIENCES
## UNIVERSITY OF GENEVA

Anthony Lehmann was a pioneer in the field of Species Distribution Modeling. He works on the use of eco-hydrological modeling to inform decision-making. He coordinated the FP7 enviroGRIDS project on the Black Sea catchment and the H2020 GEOEssential project on geoprocessing workflows linking Earth Observation to policy indicators with Essential Variables. He coordinated the SNF SWATCH21 project on eco-hydrological modeling of Swiss rivers. He is associate editor for the journal Environmental Sciences & Policy, co-edited the MOOC on Ecosystem Services and was leading the local organization of an International Ecology conference in Geneva in August 2022.

# CONGDUC PHAM

PROFESSOR
COMPUTER SCIENCE RESEARCH LABORATORY
UNIVERSITY OF PAU & ADOUR COUNTRIES

Congduc Pham is a Professor of Computer Science at the University of Pau (France). His current research interests include wireless sensor networking, Internet of Thing and congestion control/resource allocation. In H2020 WAZIUP and H2020 WAZIHUB, he was the scientific expert on Internet-of-Thing and LoRa technology and developed the LoRa IoT generic framework used in various projects. In H2020 HUBIQUITOUS he is leading the deployment of SolutionLab for providing access to IoT and AI disruptive technologies in Digital Innovation Hubs in Africa. He is also coordinating the PRIMA INTEL-IRRIS project on smart irrigation for smallholders and PRIMA RESILINK to increase smallholder's resilience. Both projects target digital platforms, IoT and AI technologies to address smallholder's concerns.

# AMINE CHEMCHEM

DATA SCIENCE RESEARCHER
ATOS

Amine Chemchem earned his B.S. in computer science from the University of Jijel in 2009. He then continued his education at USTHB, where he received an M.S. in intelligent computer systems in 2011 and a Ph.D. in computer science in 2015. His Ph.D. thesis focused on developing a new concept of knowledge mining for intelligent agents. After graduation, Amine worked as a lecturer at Saad Dahleb University. In 2018, Amine was admitted as a post-doctoral researcher at the University of Reims Champagne-Ardenne, specializing in Artificial Intelligence, machine learning, and high-performance computing. Since November 2020, Amine has been working as a datascientist at Atos, where he is recognized as a senior expert in AI.

# CHAIRMEN BIOGRAPHIES

# CLAUDIA COSIO

PROFESSOR AND DIRECTOR

ENVIRONMENTAL STRESS AND BIOMONITORING OF AQUATIC ENVIRONMENTS

UMR-I 02 SEBIO

UNIVERSITY OF REIMS CHAMPAGNE-ARDENNE

Claudia Cosio is professor at the University of Reims Champagne-Ardenne and director of the SEBIO laboratory (UMR-I 02). The goals of her research are to understand the molecular mechanisms of how biota, transduce and adapt to simultaneous changes in environmental conditions affected by multiple pollution and climate changes. More in details, she aims to understand how organisms perceive and transmit stress signals and what function stress genes, metabolites and protein products have in conferring stress tolerance, as well as to understand their interaction with development. In this context, she addresses aspects of stress physiology and how alteration of multiple parameters of growth conditions affects the response to stress responses as well as how these processes interact with other aspects of metabolism and physiology.

# ROMAIN DEBREF

ASSOCIATE PROFESSOR

ECONOMICS AND MANAGEMENT LABORATORY OF REIMS

EA 6292 REGARDS

UNIVERSITY OF REIMS CHAMPAGNE-ARDENNE

Romain Debref is an Associate Professor in Economics at the University of Reims Champagne-Ardenne and member of the REGARDS laboratory (EA 6292) of the same university. He is also Secretary General and Vice President of the Research Network on Innovation since 2018. His current work focuses on the bioeconomy and its innovations in an ecological economy perspective. He is the author of the book "Environmental innovation and eco-design: certainties and controversies" published by ISTE (London).

# BERNARD KUREK

RESEARCH DIRECTOR

FRACTIONATION OF AGRORESOURCES AND ENVIRONMENT

LABORATORY

UMR INRAE 614 FARE

UNIVERSITY OF REIMS CHAMPAGNE-ARDENNE

Bernard Kurek is a Research Director within UMR INRAE-URCA FARE. Over the past 10 years, he has worked in various regional, national and European contexts on inter- and transdisciplinary approaches to green chemistry and bioeconomies. His current field of research relates to the valorization of lignocelluloses for the use of biomaterials.

# STÉPHANIE SAYEN

ASSISTANT PROFESSOR
MOLECULAR CHEMISTRY INSTITUTE OF REIMS
UMR CNRS 7312 ICMR
UNIVERSITY OF REIMS CHAMPAGNE-ARDENNE

Stéphanie Sayen is assistant-professor at the University of Reims Champagne-Ardenne where she is conducting research in the Molecular Chemistry Institute of Reims (UMR CNRS 7312 ICMR URCA). She is studying, using a multi-scale approach, the behaviour of organic and inorganic contaminants in environmental matrices (soil, sediment, biosolid, water), more specifically their speciation and sorption at solid/liquid interfaces, and more recently their plant uptake. She is particularly interested in the establishment of structure-property relationships and the presence of contaminants in mixture, considering in particular interactions between metals and organic contaminants by complexation.

# LUIZ ANGELO STEFFENEL

PROFESSOR AND DIRECTOR
COMPUTER LABORATORY IN INTENSIVE COMPUTING AND IMAGE FOR SIMULATION
LICIIS
UNIVERSITY OF REIMS CHAMPAGNE-ARDENNE

Luiz Angelo Steffenel obtained a Ph.D. in Computer Science in 2005 at Institut National Polytechnique of Grenoble, France. He joined the University of Reims Champagne-Ardenne in 2007 and since 2021 has been assigned Director of the LICIIS Laboratory. His research covers HPC, distributed computing, edge computing, and Artificial Intelligence applied to domains such as biochemistry, atmospheric sciences, and smart agriculture. Among his recent projects, we can cite the H2020 AI4DI and Horizon Europe EdgeAI projects on AI applied to smart agriculture, the CAPES-Cofecub AeroBI project on AI for atmospherical sciences, as well as the ANR E-COVISION and HT-COVID projects related to COVID-19 forecast and drug research.