

MORNING

Panel discussion #1: Paths to World-level Excellence in Science

Moderator: Osamu KOBAYASHI, Director, Department of International Affairs, JST

In today’s rapidly evolving scientific landscape, achieving world-level excellence requires more than just individual brilliance; it demands collaboration, innovation, and strategic vision. This panel will explore the diverse pathways that lead to scientific excellence, focusing on how interdisciplinary approaches, cutting-edge technologies, and global partnerships can propel research to new heights. Case studies of groundbreaking achievements may be discussed, by analyzing the roles of mentorship and institutional support, and highlighting the importance of fostering a culture of curiosity and resilience.

Claire GIRY, President and CEO, ANR



Kazuhiro HASHIMOTO, President, JST



Maki KAWAI, President, NINS



Dean LEWIS, President, University of Bordeaux



“Notre-Dame de Paris: A Cathedral of Digital Data and Multidisciplinary Knowledge in Heritage Science”

By Livio DE LUCA, Senior Researcher, CNRS, MAP laboratory

Biography:

Livio De Luca is an architect, PhD in Engineering with an HDR (Habilitation) in computer science, and is a Research Director at the CNRS. From 2012 to 2023, he directed the UMR CNRS/MC MAP research unit. His research focuses on the surveying, geometric modelling, and semantic enrichment of digital representations of heritage objects, as well as the development of multidimensional information systems. He has participated in numerous national and international projects and is the editor of the Journal of Cultural Heritage (Elsevier) as well as an associate editor of several other scientific journals. His work has been recognized with several awards, including the CNRS Medal of Innovation in 2019. Since 2019, he has been coordinating the «digital data» working group of the scientific project of the CNRS and the Ministry of Culture for the restoration of Notre-Dame de Paris. In 2022, he received an ERC Advanced Grant.

Abstract:

Research on cultural heritage involves the intersection of material objects and multidisciplinary studies, serving as a platform for generating collective knowledge. In the digital age, this intersection provides an ideal framework for the collective analysis and interpretation of facts, objects, and phenomena, facilitating the creation of new scientific and cultural resources—our heritage of tomorrow. How can we document the diverse perspectives focused on the same object of study? How do we analyze their dynamic interactions, overlaps, and fusions to generate new knowledge? Our research introduces a novel field—multidimensional, multidisciplinary digital data—as a foundational element for studying the mechanisms of knowledge production in heritage science. Utilizing an innovative approach in computational modeling and digitization, we leverage the Notre-Dame de Paris scientific project, which includes contributions from archaeology, anthropology, architecture, history, chemistry, physics, and computer science, to construct and analyse a comprehensive data corpus on scientific practices built around a common denominator. Our goal is to shift the focus from merely digitizing physical objects, to unveiling and analyzing the interplay between the complex characteristics of the material objects and the objects of knowledge developed by researchers through their practices.



“Changing Global Climate Governance towards Orchestration and Hybridization: A More Effective Regime?”

By Yukari TAKAMURA, Prof., The University of Tokyo, Institute for Future Initiatives

Biography:

Yukari Takamura is a Professor at the Institute for Future Initiatives at the University of Tokyo. After graduating from Kyoto University and receiving Master of Laws (Public International Law) from Hitotsubashi University, Tokyo, she was appointed Associate Professor at Shizuoka University. Before joining the University of Tokyo in 2018, she worked as Professor at Ryukoku University, Kyoto, and Professor at Nagoya University, Japan. She also studied at Graduate School of University of Paris II (Panthéon-Assas), France and was Visiting Researcher at University of London, U.K. Specializing in international law and environmental law, her research focuses on legal and governance issues relating to multilateral environmental agreements. She serves as member of governmental advisory bodies, among others, Central Environment Council as President. She is also member of the Sustainability Standards Board of Japan (SSBJ) and member of the Advisory Group on Climate Change and Sustainable Development of the Asian Development Bank (ADB). She served as Vice President of Science Council of Japan (2020 - 2023).

Abstract:

Climate change is causing dangerous and widespread adverse impacts and affecting the lives of billions of people around the world, despite efforts to reduce the risks. International society has strengthened its efforts to tackle climate change through international treaties, agreement among countries, such as the United Nations Framework Convention on Climate Change (UNFCCC), the Kyoto Protocol and the Paris Agreement. The recent new phenomena of the global climate governance is for non-state actors, particularly corporations and financial institutions, to place climate change issue as their own business goals and mission and deploy their actions to achieve net-zero emissions throughout their own value chains. While sharing the goals of the Paris Agreement, these actions are not directly based on agreements between sovereign States, but rather on rules formed by and with non-state actors. Global climate governance has shown an aspect of orchestration and hybridisation of multiple regimes.



Panel discussion #2: Fostering New Generations of Scientists

Moderator: Guillaume FIQUET, Vice-president International Relations, Sorbonne Université

The panelists will share insights on how to create motivating environments that encourage new generations to embrace their scientific careers. They will discuss springboard programs that can help students and young researchers launch their careers while networking and expanding their horizons. Additionally, they will explore innovative strategies for mentoring and supporting young scientists and highlight the importance of interdisciplinary collaboration in scientific training, examining how it can enhance research outcomes and broaden educational experiences. Lastly, they will address the human resource environment, discussing earnings and employment stability in a competitive landscape.



Teruo FUJII, President, The University of Tokyo

Tetsuya MIZUMOTO, Executive Director, JSPS



Antoine PETIT, Chairman and CEO, CNRS

AFTERNOON

Parallel session: Heritage Studies

Chair: Delphine VOMSCHEID, Researcher, IFRJ-MFJ - French Research Institute on Japan at Maison Franco-Japonaise (French Europe & Foreign Affairs Ministry - CNRS)

Co-chair: Livio DE LUCA, Senior Researcher, CNRS, Models and Simulations for Architecture and Heritage Laboratory (MAP)

Cécile ASANUMA-BRICE, Researcher, CNRS

*Dealing with Heritage in the risk society: the complex case of reconstruction in Fukushima*

Takamitsu JIMURA, Researcher, Musashi University

*Research for the conservation of historic wooden church buildings in Eastern Europe*

Yasufumi UEKITA, Researcher, University of Tsukuba

*Key issues in the relationship between cultural heritage and tourism in Japan*

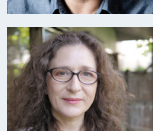
Flash talks

Sania CARBONE, PhD Student, INALCO - IFRAE

Lintaro KAJIWARA, PhD Student, University of Tsukuba

Rena YAMAGUCHI, PhD Student, University PSL - CRCAO

Yi WANG, PhD Student, University of Tsukuba



Parallel session: From Particle Physics to Cosmology

Chair: Michel GONIN, Director, ILANCE - International Research Laboratory (The University of Tokyo and CNRS)

Co-chair: Tomotake MATSUMURA, Professor, Kavli IPMU, The University of Tokyo

Masaya ISHINO, Researcher, ICEPP - *LHC Programs*

Benjamin QUILAIN, Researcher, ILANCE - *Neutrinos Programs*

Guillaume PATANCHON, Researcher, ILANCE - *Cosmology Programs - Cosmic Microwave Background*

Kotaro KOHNO, Professor, IoA - *Astrophysics Programs*

Flash talks

Hitoshi OSHIMA, ICRR - *Telescope Array*

Shotaro ABE, ICRR - *Cherenkov Telescope Array Observatory*

Christine QUACH, ILANCE - *Machine Learning*

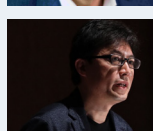
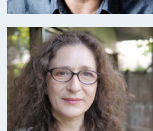
Fumiaki OTANI, IPMU - *BELLE II*

Clément LELOUP, IPMU - *LiteBird*

Jessica COWELL, IPMU - *Cosmology from HSC*

Lorenzo PÉRISSÉ, ILANCE - *Super-Kamiokande*

Kanako NARITA, IoA - *TIFUUN*



Parallel session: Biological Bases of Ecological Actions

Chair: Atsushi IRIKI, Senior Researcher, RIKEN, Innovation Design Office

Living organisms, including humans, can never survive isolated by themselves alone. They must ever keep selecting and exhibiting the appropriate-most behaviors in social and natural environments. But, these can only be achieved through the dynamics of their own fundamental “biological systems”. This session will bring together the results of wide spectrum of comparative biological research across human and non-human primates to invertebrates, based on the multifaceted Japanese and French views of nature and humanity, and attempts to deepen the discussion to pursue the image of humans as an ecological living system.

Azusa KAMIKOUCHI  
Professor,  
Nagoya University



Pier Francesco FERRARI  
Director of Research,  
CNRS



Sotaro SHIMADA  
Professor,  
Meiji University



Flash talks

Shinya YAMAMOTO, Associate Professor, Kyoto University

Banty TIA, Researcher, Institut de Neurosciences de la Timone

Mitsuaki TAKEMI, Project Assistant Professor, Keio University

Parallel session: Artificial Intelligence and Embodiment

Chair: Yukiko NAKANO, Professor, Seikei University

Humans explore and understand the world through their bodies, grounding their knowledge through their observations, experiences, and interactions with the world. In contrast, AI technologies, such as large language models (LLMs) and generative AI, which have recently demonstrated amazing performance, learn and produce without any perception of the physical world. In this session, researchers from France and Japan will discuss how bodily expressions and perceptions interact with intelligence, and whether AI models without physical embodiment and perceptions differ from human intelligence. The discussion will also address future directions for research on embodied AI through collaboration between France and Japan.

Yasuo KUNIYOSHI  
Professor,  
Director of AI Center,  
The University of Tokyo



Catherine PELACHAUD  
Director of Research,  
CNRS



Junichi YAMAGISHI  
Professor,  
NII



Flash talks

Shogo OKADA, Associate Professor, Japan Advanced Institute of Science & Technology

Brian RAVENET, Assistant Professor, Université Paris-Saclay

Parallel session: Materials

Chairs: Kazuhiro HONO, President, National Institute for Materials Science (NIMS)

Jacques MADDALUNO, Director, CNRS Chemistry

Maciej LORENC  
Senior Researcher,  
CNRS, IRL Dynacom



Takao MORI  
Professor,  
NIMS



Isao TANAKA  
Professor,  
Kyoto University



Flash talks

Maryam ALASHOOR, PhD Student, IRL Dynacom

Cédric BOURGÈS, Researcher, NIMS-ICYS

Naoji MATSUHISA, Researcher, IRL LIMMS

Kazuki NAKAMURA, PhD Student, IRL Dynacom

Lucile VASCHALDE, Researcher, IRL LINK



AFTERNOON

14:00 - 14:10 Miraikan hall	<b>Opening Speeches</b> Antoine PETIT, Chairman and CEO, CNRS <i>Presentation of the program</i>
	<b>Five thematic sessions in parallel</b> <ul style="list-style-type: none"><li>• <b>Materials</b> - Miraikan hall Chairs: Kazuhiro HONO, President, National Institute for Materials Science (NIMS) Jacques MADDALUNO, Director, CNRS Chemistry</li><li>• <b>Artificial Intelligence and Embodiment</b> - Venus room Chair: Yukiko NAKANO, Professor, Seikei University, Dept. of Computer and Information Science</li><li>• <b>Biological Bases of Ecological Actions</b> - Mercury room Chair: Atsushi IRIKI, Senior Researcher, RIKEN, Innovation Design Office</li><li>• <b>From Particle Physics to Cosmology</b> - Uranus room Chair: Michel GONIN, Director, ILANCE - International Research Laboratory (The University of Tokyo and CNRS) Co-Chair: Tomotake MATSUMURA, Professor, Kavli IPMU, The University of Tokyo</li><li>• <b>Heritage Studies</b> - Saturn room Chair: Delphine VOMSCHIED, Researcher, IFRJ-MFJ - French Research Institute on Japan at Maison Franco-Japonaise (French Europe &amp; Foreign Affairs Ministry and CNRS) Co-chair: Livio DE LUCA, Senior Researcher, CNRS, Models and Simulations for Architecture and Heritage Laboratory (MAP)</li></ul>
14:15 - 16:00	
16:00 - 16:20	<b>Coffee Break</b>
16:20 - 17:00 Miraikan hall	<b>Plenary Conclusive Meeting</b> <i>Presentation of the conclusions of the thematic sessions (5 min. each)</i> <i>Wrapping up speeches (5 min. each)</i> Tetsuya MIZUMOTO, Executive Director, JSPS Claire GIRY, President and CEO, French National Research Agency (ANR)  <i>End of the event</i>

ORGANIZATIONS & CONTACT

Organizing institutions



CNRS: dei-tokyo@cnrs.fr  
JSPS: intlcoop1@jspm.go.jp  
JST: jst.international@jst.go.jp

Supporting organizations



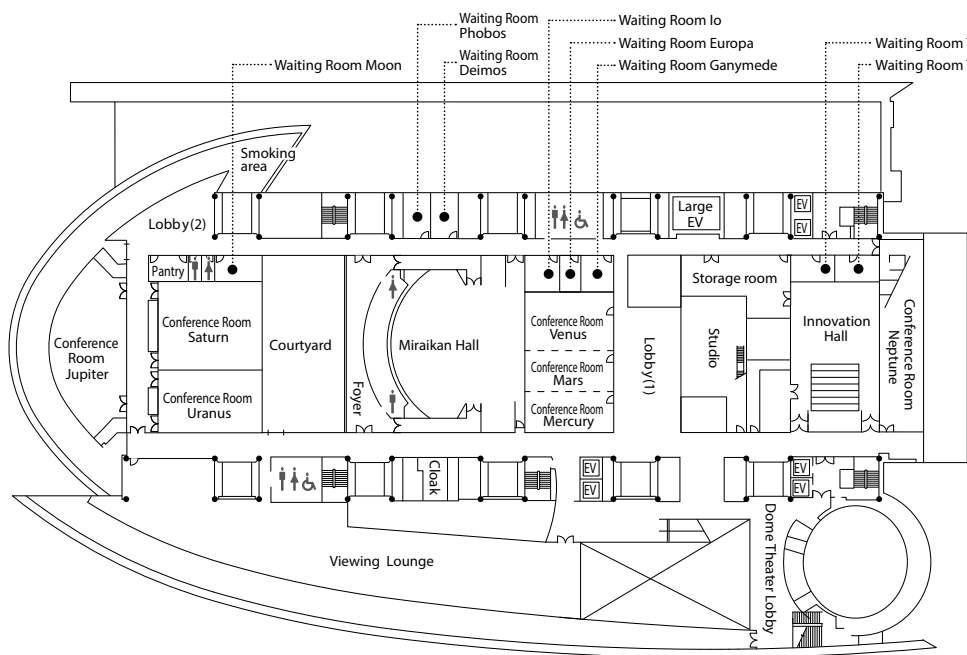
WIFI

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mfr01\_english  
Password: ri3OQLthlp42r

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Password: fruQiw4fr7Ket

FLOOR MAP

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CNRS-JSPS-JST Celebration Event for the  
50th Anniversary of France-Japan Scientific Cooperation

Agenda Book

October 9, 2024 - Miraikan, Tokyo

Program

Building the Future Together with Science

MORNING

09:00 - 09:15 Miraikan hall	<b>Opening Speeches</b> Kazuhiro HASHIMOTO, President, JST Antoine PETIT, Chairman and CEO, CNRS Tsuyoshi SUGINO, President, JSPS Yuichi INOUE, Director General, Science & Technology Policy Bureau, MEXT Philippe SETTON, Ambassador of France in Japan
09:20 - 10:05 Miraikan hall	<b>Panel discussion #1: Paths to World-level Excellence in Science</b> Claire GIRY, President and CEO, French National Research Agency (ANR) Kazuhiro HASHIMOTO, President, JST Maki KAWAI, President, National Institute of Natural Sciences (NINS) Dean LEWIS, President, University of Bordeaux <i>Moderator: Osamu KOBAYASHI, Director, Department of International Affairs, JST</i>
10:05 - 10:25 Miraikan hall	<b>Keynote Speech by Livio DE LUCA</b> Senior Researcher, CNRS, Models and Simulations for Architecture and Heritage Laboratory (MAP) “Notre-Dame de Paris: A Cathedral of Digital Data and Multidisciplinary Knowledge in Heritage Science”
10:25 - 10:30	<b>Group Photography</b>
10:30 - 10:50	<b>Coffee Break</b>
10:50 - 11:10 Miraikan hall	<b>Keynote Speech by Yukari TAKAMURA</b> Professor, The University of Tokyo, Institute for Future Initiatives “Changing Global Climate Governance towards Orchestration and Hybridization: A More Effective Regime?”
11:10 - 11:55 Miraikan hall	<b>Panel discussion #2: Fostering New Generations of Scientists</b> Teruo FUJII, President, The University of Tokyo Tetsuya MIZUMOTO, Executive Director, JSPS Antoine PETIT, Chairman and CEO, CNRS <i>Moderator: Guillaume FIQUET, Vice-president International Relations, Sorbonne Université</i>
11:55 - 12:00 Miraikan hall	<b>Closing Remarks</b> Teruo FUJII, President, The University of Tokyo Jean-Eric PAQUET, Ambassador of the European Union (EU) to Japan

Note: Bento Lunch (12:00 - 14:00) will be provided for those staying at Miraikan