

# Nuclear revival and legacies: insights from the humanities and social sciences

## International Conference

École nationale des ponts et chaussées, Champs sur Marne (Paris) – 21-22 October 2024

Nuclear energy was a minor topic in previous international negotiations on climate change. However, it took an unprecedented place at COP 28 in Dubai in late 2023. The period opened by the Fukushima disaster in 2011 seems to be drawing to a close - at least partially - as several countries have affirmed a commitment to (re)developing nuclear energy. This so-called “relaunch”, “revival” or even “renaissance” consists in strengthening or accelerating development plans after years of crisis. In the context of climate change and geopolitical tensions over energy supply, many actors are reviving and reconfiguring justifications and promises that have accompanied nuclear technology since the post-war years. These include energy abundance, independence from fossil fuels, affordable electricity, welfare at the local and national scale, economic growth, and technological innovation. Taken together, this makes nuclear energy development appear necessary. However, nuclear power, which only accounts for a small portion of the global energy mix, must also contend with the uncertainties and costs associated with aging infrastructure, plant life extension, waste management, and decommissioning. Moreover, recent projects have resulted in unprecedented cost overruns, while the economic profitability of nuclear power as an argument is increasingly challenged by the plummeting costs for many renewable energy sources (e.g. wind and solar).

In this context, the humanities and social sciences can provide tools for understanding the so-called revival through analysis rooted in different disciplines. This revival both presupposes and engages legacies that persevere, such as the persistence of past futures (Koselleck, 2004), “old” technologies (Edgerton, 2008), and large technical systems (Hughes, 1987). We argue that nuclear futures are framed by categories, practices, and materials inherited from the past and perpetuated until today. This hypothesis is supported by a methodological commitment to analyzing nuclear technology and policy in the long term.

While holding a futuristic promise echoing past discourses, nuclear power carries an ancient legacy that weighs on its future. In the first decades as a civil industry, nuclear technologies relied primarily on an ideal of economic or scientific progress. However, what happens when the nuclear industry is simultaneously faced with issues of decline and renewal? How does this configuration shed light on the challenges of managing infrastructures that are presented as crucial in the context of climate change?

This conference aims to bring together social science and humanities perspectives on nuclear issues in an unprecedented context. Sociology, history, philosophy, anthropology, geography, political science, economy, and Science and Technology Studies approaches can complement each other to provide new insights into developments in this sector.

*With the support of:*



# Program

## Monday, October 21st

9h - Welcome Coffee

### 9h45-10h15. OPENING SPEECHES AND INTRODUCTION

- Jérôme LESUEUR, École nationale des ponts et chaussées
- Marc BARBIER, IFRIS
- and ORGANISING TEAM

### 10h15-11h15. KEYNOTE by Philip JOHNSTONE & Andrew STIRLING (University of Sussex)

*Evidence, Implications and Opportunities around Concealed Civil and Military Nuclear Obsolescence*

### 11h15-12h55. SESSION 1 - NUCLEAR PROMISES

- Willem BRABANTS (Liège University, SCK-CEN), *Framing Nuclear Innovation: SMRs in Belgian Media*
- Lucie GENAY (EHIC, Limoges University), *From “Atoms for Peace” to “Atoms for the Earth”: The Idaho National Laboratory and the Birth of the Green Atom*
- Claire LE RENARD (LATTS, École nationale des ponts et chaussées), *A Never-ending Narrative: The Grammar of Technologists Crafting the Credibility of the “Fast-Breeder” Reactor*
- Markku LEHTONEN (Pompeu Fabra, University of Jyväskylä), Matti KOJO (LUT University), Hanna-Mari HUSU (LUT University), Mika KARI (University of Jyväskylä), Tapio LITMANEN (University of Jyväskylä), *Constructing the SMR Promise: Promissory Narratives and their Counter-narratives in Canada, Finland, France, and the UK*

13h-14h15 - Lunch

### 14h15-15h30. SESSION 2 - DECAYING INFRASTRUCTURES AND DECOMMISSIONING

- Martin DENOUN, Pierre DELVENNE, Céline PAROTTE (University of Liège), *Grasping Infrastructure through Microcracks. The Stress Corrosion case in French Nuclear Reactors as a Nuclear Material Politics*
- Ange POTTIN, Ulrike FELT (University of Vienna), *Transforming Nuclear Reactors into Waste: Decommissioning as a Practice of Residual Care*
- Andrei STSIAPANAU (Vytautas Magnus University), *Unfolding the Ignalina NPP Archives: Decommission and Transitions*

15h30-16h - Break

### 16h-17h15. SESSION 3 – NUCLEAR FUELS AND RESIDUES

- Teva MEYER (CRESAT, University Haute Alsace), *Securitizing for Nothing? Discussing the Weaponability of Nuclear Fuel Supplies in the European Union*
- Romain GARCIER (ENS Lyon), *Informing and Complying. Information Infrastructures and the Management of Low and Very Low Level Radioactive Waste*
- Alexis GEISLER-ROBLIN (ENS Paris), *Sustainable Waste and the Depoliticization of the Future*

# Tuesday, October 22nd

8h30-9h - Coffee

## 9h-10h15. SESSION 4 - CONTAMINATED LEGACIES

- Rina KOJIMA (LATTS), *Reconstruction and Resilience after Fukushima: A Critical Analysis of Nuclear Risk and Disaster*
- Shachi MOKASHI and Michiel VAN OUDHEUSDEN (Vrije Universiteit Amsterdam), *From Radiation to Air Pollution: Infrastructural Manoeuvring within Citizen Environmental Monitoring*
- Anaïs MAURER (Rutgers University), *The Ocean on Fire: Pacific Stories from Nuclear Survivors and Climate Activists*

10h15-10h45 - Break

## 10h45-12h30. SESSION 5 - NUCLEAR TERRITORIES

- Jérémy BOUILLET (EDF R&D SEQUOIA-GRETS, Sciences Po), *Nothing has changed, everything has changed. The surge in public opinion in its support for nuclear energy in France and Europe (2020-2024)*
- Gabriella RAGO (University of Turin, University of Naples), *Fusion Valley. The International Thermonuclear Experimental Reactor (ITER) and the Territories (2006-2012)*
- Belinda RAVAZ (Haute École d'Ingénierie et de gestion du Canton de Vaud, UHA), *Spatial Redevelopment Trajectories of Nuclear Sites. The Cases of Brunsbüttel and Fessenheim*
- Alexis SPIRE (CNRS), *The Territorial Bias of Consent to Nuclear Risk Ethnographic Study Among the Residents of the Dunkirk Coastline*

12h30-13h50 - Lunch

## 13h50-14h50. KEYNOTE by Tatiana KASPERSKI (Södertörn University)

*Can the atom ever be peaceful? Ukraine from nuclear weapons to reactors as weapons.*

## 14h50-16h30. SESSION 6 - NUCLEAR TRAJECTORIES AND NARRATIVES

- Vidar EKSTRÖM, Nina KIVINEN, Åse LINNÉ, Maria MURGUNOVA, Marcus LINDAHL (Uppsala University), *Reconnecting and Disconnecting from Nuclear History – Imaginaries from Sweden's Nuclear Discourse*
- Siegfried EVENS (KULeuven), *Atoms From Abroad: A Transnational History of Nuclear Energy in Belgium (1953-1985)*
- Dejan JOVANOVIĆ, Ivana DAMNJANOVIĆ (University of Belgrade), *New Fears, New Hopes: Politics of Nuclear Power in Serbia*
- Stéphanie TILLEMENT (IMT Atlantique, Laboratoire d'économie et management de Nantes) and Frédéric GARCAS (University of Lille), *Planning and the Nuclear Industry in "post-Messmer" France*

## 16h30-17h. GENERAL TAKEAWAYS - CONCLUSION OF THE CONFERENCE

## How to get there

École nationale des ponts et chaussées  
6 et 8 avenue Blaise-Pascal - Cité Descartes – Champs-sur-Marne  
77455 Marne-la-Vallée Cedex 2

Access by the RER A suburban train line: station Noisy - Champs, **exit 3 - Cité Descartes**.  
Walking directions (6-7 mn) : <https://ecoledesponts.fr/en/getting-school>. Be careful that if you exit the RER station at another exit, there is a very long way to go by foot (20 mn).

## Organizing team

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