Institut
Grand-Ducal
Section des Sciences

LECTURE SERIES

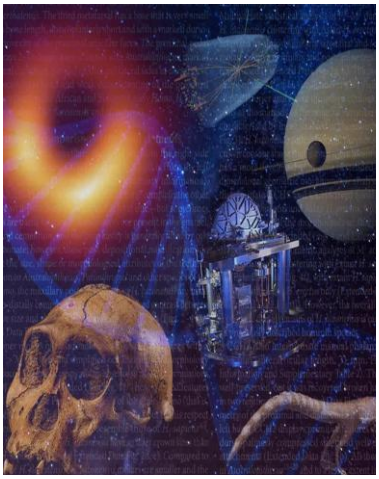
« Les Chercheurs Luxembourgeois à l'Etranger »

Bibliothèque Nationale du Luxembourg
37D Avenue John F. Kennedy, Kirchberg
Lecture Hall, third floor
Talk & Q&A: 18.00-20.00
Open for free to general public
Registration (*mandatory but free*)**:**
https://bnl.public.lu/en/a-la-une/agenda/2026/handling-uncertainty.html

Organised by Section des Sciences Naturelles,
Physiques et Mathématiques
de L'INSTITUT GRAND-DUCAL
For further details: https://www.igdss.lu/

29 October
Christian Wagner
University of Nottingham, UK

« Handling uncertainty for better-informed decision-making » (talk in English)



Within the Lab of Uncertainty in Data and Decision-making at the University of Nottingham, we leverage interdisciplinary AI research to put people in a better-informed position to make decisions in an uncertain world. But what is uncertainty in practice, how do we capture and handle it?
In this talk, I will give an overview of approaches to address these questions. Taking a conceptual view, I will start by disentangling information into sources and evidence, articulating the importance of uncertainty at the level of sources specifically. I will give an outlook on ongoing research at the interface of human cognition and AI in this space.
Adopting a more practical focus, I will then cover a body of fundamental research across Computer Science and Psychology targeting the elicitation of uncertain information from people, its subsequent modelling and analysis. I will use real-world examples spanning environmental management to cyber security to show how the research can deliver real world impact by delivering otherwise inaccessible insight in complex decision-making settings.
The talk is tailored for a general interdisciplinary audience interested in the elicitation and handling of uncertainty.

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