

## **Keynote 2: Leveraging Metacognition for Scientific Thinking About Contested Topics: From Climate Change to COVID-19**

*Tuesday 2 September 2025 11:15 (1 hour)*

**Abstract:**

Metacognition—the ability to reflect on the reliability of our own knowledge—both influences and is shaped by public debates about contested scientific topics. In this talk, I will explore how metacognition impacts belief formation and polarization across politically charged scientific domains, including climate change and COVID-19. Drawing on recent studies, I will synthesize why metacognition matters and how it can shape scientific thinking, particularly when evidence and worldviews collide.

**Biographical information:**

Dr. Helen Fischer is a researcher at the Leibniz Institut für Wissensmedien, Tübingen, Germany. She investigates the role of metacognition, our insight into the reliability and the limits of one's own knowledge for beliefs about politicized science such as climate change or COVID-19. Her work has been published in leading journals including Nature Climate Change, PNAS, American Psychologist, and Trends in Cognitive Sciences. Helen Fischer received her doctorate in cognitive psychology from the University of Heidelberg in 2016, and held researcher positions at various institutions, including the the Karlsruhe Institute of Technology (KIT), Stockholm University, the Max Planck Institute for Human Development, Berlin, and the University of Waikato, New Zealand. Her research is funded by the German Research Foundation (DFG) and the Fritz Thyssen Foundation.

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