

HEURE: 11H00 – 12H00

LIEU: VISIOCONFÉRENCE via WebEx

MARDI
20 Août 2024
COLLOQUE

« AI-assisted modelling of heat-related mortality in Germany »

INTERVENANT

- Dr. Christopher Irrgang, is a mathematician and Earth system researcher with a specialization in artificial intelligence. During the last years, he has continuously broadened his research areas, connecting climate, social, and life sciences through process- and data-driven approaches. Currently, he is responsible for an interdisciplinary research team of ten members at the graduate to postdoctoral level. Besides the scientific work, he is taking part in the structural and administrative build-up of the Centre for Artificial Intelligence in Public Health Research (ZKI-PH), which is the newest department of the Robert Koch Institute (RKI). Over the period of one year, they have recruited around 40 scientific members (PhD students, PostDocs, group leads) in four research units. They are focusing their work on current challenges in public health systems and future pandemic preparedness.

ABSTRACT:

Heat has become a leading cause of preventable deaths during summer. Understanding the link between high temperatures and excess mortality is crucial for designing effective prevention and adaptation plans. Yet, data analyses are challenging due to non-linear heat-mortality dynamics and oftentimes fragmented data archives over different agglomeration levels. We introduced a multi-scale machine learning model to estimate heat-related mortality with variable temporal and spatial resolution. This approach allows us to estimate heat-related mortality at different scales, such as regional heat risk during a specific heatwave, annual and nationwide heat risk, or future heat risk under climate change. Using Germany as a case study, we estimated heat-related mortality risks at district level and visualized local health risks during a selected heatwave.

Recommandé par la Société Suisse des Spécialistes en prévention et santé publique (SPHD) pour la reconnaissance de la formation continue. Participer à la réunion WebEx

[Lien WebEx](#)