Physics Colloquium Mainz

April 30, 2024 at 16 c.t.

Lecture room KPH,
Johann-Joachim-Becher-Weg 45, JGU

In this talk I will introduce infectious diseases and their sensitivity to climate variability and change. I will describe and contrast experimental evidence with empirical observations and data. In the talk I will discuss systems and interactions enabling introduction and transmission of emergent vectors, hosts, and pathogens. I will further give examples of how mathematical process-based models and machine learning approaches are used and how they can be applied to study patterns and responses to these changes. Finally, I will talk about novel applications of machine learning in surveillance and early warnings, as well as the evaluation of interventions to guide effective responses.

Infectious diseases in a changing climate – what's lurking around the corner?

Prof. Dr. Joacim Rocklöv

Heidelberg University

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