



Mathematisches Kolloquium

Causal inference and causal discovery (with perspectives in Earth sciences)

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rechtzeitig bekanntgegeben.**

The heart of the scientific enterprise is a rational effort to understand the causes behind the phenomena we observe. In disciplines dealing with complex dynamical systems, such as the Earth system, real experiments are rarely feasible. However, a rapidly increasing amount of observational and simulated data opens up the use of novel data-driven causal inference methods beyond the commonly adopted correlation techniques. The goal of causal inference is to use qualitative knowledge about causal relations to quantify causal effects and the more challenging goal of causal discovery is to learn causal relations without such qualitative knowledge. In this talk I will present an overview of these exciting and widely applicable frameworks and illustrate them with applications from Earth sciences.

Der Vortrag ist für ein breites Publikum geeignet