

Gemeinsames Kolloquium der Mathematik & der Physik

Donnerstag, 18.12.2025, 16:30 Uhr – Hörsaal 5J

Langevin dynamics, thermostats, and applications

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Brownian and Langevin dynamics have been the mainstays of computational science for well over a century. Thermostat methods like Nosé dynamics originated in the 1980s as simplified models to mimic properties of thermal baths in molecular simulation. In this talk I will address the unification of these different approaches, their discretization, and their properties as general purpose tools for large scale computation in the physical sciences, machine learning and statistics.

**Ab 16:00 Uhr Kaffee, Tee und Gebäck im Foyer vor dem Dekanat der
Math.-Nat.-Fakultät (Gebäude 25.31. Ebene 00)**

**Für die Dozenten der Mathematik & der Physik
Prof. Dr. Jürgen Horbach**