PHYSTAT - Statistics meets ML



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Simulation-based machine learning for gravitational-wave analysis

Tuesday 10 September 2024 11:45 (45 minutes)

Gravitational waves (GWs) provide a unique window to the universe, enabling us to study mergers of black holes and/or neutron stars. In my talk, I will highlight how machine learning can address critical limitations in GW data analysis. I will present key innovations in this field, driven by unusually high requirements for accuracy, reliability and interpretability. Finally, I will discuss how insights gained from GW science transfer to other application domains of machine learning.

Primary Field of Research

Presenter: DAX, Maximilian **Session Classification:** Talks