

## The road to AI-based discoveries

*Donnerstag, 13. November 2025 09:30 (30 Minuten)*

Modern machine learning and artificial intelligence fundamentally change how we analyze huge volumes of data in particle physics and adjacent scientific disciplines. These breakthroughs promise new insights into major scientific questions such as the nature of dark matter or the existence of physical phenomena beyond the standard model. This talk will provide an overview of recent, exciting developments with a focus on model agnostic search strategies (including first experimental results!) as well as foundation models and increasingly autonomous AI-based agents of discovery.

**Vortragende(r):** KASIECZKA, Gregor (Universität Hamburg)

**Sitzung Einordnung:** Plenary