Beitrag ID: **18** Typ: **Talk**

Interpretable AI for scientific discovery

Donnerstag, 13. November 2025 15:30 (30 Minuten)

While machine learning techniques are incredibly powerful, they are also notoriously difficult to interpret. This poses a problem fore research areas such as pure mathematics or certain fields in theoretical physics, which require rigor and understanding, while ML algorithms are often stochastic and black box. I will first give a brief overview of ML techniques that lead to rigorous, exact results. After that, I will focus on one technique called symbolic regression. I will explain how Kolmogorov-Arnold networks can be paired with genetic algorithms to obtain symbolic formulae instead of numeric expressions.

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Sitzung Einordnung: Plenary