

## **Lecture Announcement Winter Term 2025/26**

Prof. Dr. Luca M. Ghiringhelli, Head of Department of the Research Group *Computational and Data Science in Materials Research (CDSMR)* at Scientific Computing Center (SCC) will offer the following lecture in the winter term:

Advanced Artificial-Intelligence methods for Chemistry

## Topics:

Small data driven modeling for materials and chemical informatics: Sparse regression, Symbolic regression, Active learning, Physics-based AI. From recurrent neural networks and variational autoencoders to generative AI (diffusion and transformers); application to materials/chemical informatics and language models for literature harvesting.

**Time:** Wednesdays, 11:45 – 13:15 (start on October 29, 2025)

Place: IPC Seminar Room, 4th floor, build. 30.44