FAU

Friedrich-Alexander-Universität
Research Center for
Mathematics of Data | MoD

FAU MoD Lecture Series

New avenues for the interaction of computational mechanics and machine learning

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#FAUMoDLecture

WHEN
Thursday **October 24, 2024**
14:30H (Berlin time)

WHERE
On-site / Online

Friedrich-Alexander-Universität
Erlangen-Nürnberg
Room H13 Johann-Radon-Hörsaal
Cauerstraße 11, 91058
Erlangen - Bavaria, Germany

FAU Zoom link:
https://fau.zoom-x.de/j/62410943213

Meeting ID: **624 1094 3213**
PIN code: **694096**

Neural networks and learning algorithms have gained substantial attention among researchers engaged in computational mechanics.

Notably, there are well-established methodologies for employing these tools in solving mathematical models based on partial differential equations.

Additionally, a significant overlap exists between the machine learning and computational science and engineering communities in the realm of data-driven reduced order models.

After reviewing the main trends in this field, we will discuss novel emerging approaches such as the application of learning algorithms to expedite the resolution of linear systems or to foster the approximation of multiscale problems.