

Theoriekolloquium

Am **1. Dezember 2022** um **14.15 Uhr** im **Raum W2 1-143** hält

Herr Markus Schmitt (FA Jülich)

einen Vortrag mit dem Titel

Simulating non-equilibrium quantum matter with neural quantum states

The numerical simulation of many-body quantum dynamics constitutes a pivotal challenge of computational physics due to the typical growth of entanglement in the course of the evolution. I will discuss how combining the time-dependent variational principle with artificial neural networks as ansatz for the variational wave function allows us to overcome some of the current limitations. As an application I will address quantum phase transition dynamics in two spatial dimensions of a model that is experimentally realized in Rydberg quantum simulators.

Interessierte sind herzlich eingeladen.

gez. Prof. Dr. Andreas Engel