

PHYSIKALISCHES KOLLOQUIUM

Sommersemester 2021

Das Kolloquium findet (soweit unten nicht anders angegeben) jeweils montags **jeweils montags um 17:15 Uhr online via Zoom** statt.

(Der jeweilige Link wird noch zur Verfügung gestellt.).

19. April 2021

Prof. Dr. Gert Aarts
University of Swansea, Department of Physics

A physicist's approach to machine learning

Abstract

In recent years applications of machine learning in the physical sciences have increased substantially. In this talk I will discuss some recent developments, starting from “standard” classification problems of phase transitions in statistical physics. This will be followed by giving a physical interpretation of machine learning functions as observables in a statistical system, paving the way to include them in Hamiltonians. Finally I will speculate on whether our experience in quantum field theory can be exploited to further develop machine learning frameworks.

Für die Dozentinnen bzw. Dozenten der Fakultät

Prof. Dr. Hankiewicz, Prof Dr. Höfling, PD. Dr. Meyer, Prof Dr. Sing und Hr. Frerichs