

Plenarvortrag PV II Di 11:00 HG X und HG Aula
The renormalization group - from peV to TeV, and from physics to mathematics — ●MANFRED SALMHOFER — Institut für theoretische Physik, Universität Heidelberg

Since its inception in the context of quantum field theory and critical phenomena, the renormalization group has gradually developed into

a universal tool that applies to theories at all energy scales, from ultracold atomic gases to high energy physics. Besides being successful in practice, it also has the virtue of allowing for mathematical proofs and indeed, its applications now range far into mathematics as well. In this talk I will give a survey of the method, its applications, and some recent developments.