

MP 12: Hauptvortrag

Zeit: Donnerstag 14:00–14:50

Raum: JUR H

Hauptvortrag MP 12.1 Do 14:00 JUR H
Conformal field theory with boundaries — •INGO RUNKEL —
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Two-dimensional conformal field theory describes the critical behaviour of two-dimensional statistical systems or one-dimensional quantum systems, and it provides the world sheet description of string theory. In all of these situations it is natural to consider the theory in the presence of a boundary. I would like to present some surprising outcomes

of the study of the boundary degrees of freedom. For example, in a class of models called rational conformal field theories, knowledge of the boundary theory already allows to deduce which bulk theory it belongs to. In other words, the correlators involving only fields inserted at the boundary allow to infer the space of local fields in the bulk and their correlators. Since the boundary theory is often simpler than the bulk theory, this insight is also helpful in the construction and classification of conformal field theories.