Universität Bielefeld Fakultät für Physik

Seminar

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Background-independent renormalization in loop quantum gravity

In this talk I give a brief introduction to loop quantum gravity, a framework for quantizing Einstein's theory of general relativity. Its interesting features include the discrete nature of space and time, as well as a rigorous adherence to the principle of background-independence, which plays a central role in general relativity. Background-independence however makes the notion of renormalization and the continuum limit rather intricate, since there is no a priori structure with which to distinguish large and small scales. In the second part of the talk I will go into recent developments of background-independent renormalization in this context, and present recent results.

Tuesday, 05.12.2017, 14:15 Uhr
Place: D6-135