MP 3: Hauptvortrag

Zeit: Donnerstag 11:45–12:30 Raum: KGI-HS 1199

Hauptvortrag MP 3.1 Do 11:45 KGI-HS 1199

Noncommutative Quantum Field Theory — •Harald Grosse — Fakultät für Physik, Universität Wien

The unsolved problems of Quantum Field Theory led to the opinion that gravity should be included. This leads to the formulation of Quantum field Theories on Fuzzy Space-Time. We were able to obtain a few remarkable results for the renormalized pertubation expansion. The Landau ghost problem is solved. We suppose that a nonpertubative construction of a Higgsfield model will result, the renormalization trajectories are bounded which solves the triviality problem. Deformed Standard model and deformed Gravity are lively expanding subjects which will be reviewed too. There are some measurable implications.