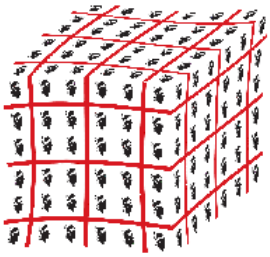

Contribution ID: **35** Type: **not specified**

Topological gravity on a lattice

Thursday, 17 June 2010 17:00 (20 minutes)

I review the connection between Chern Simons theory and three dimensional Einstein-Hilbert gravity.
I point out that both the moduli space and topological observables in the gravitational theory are shared with a twisted
super Yang-Mills theory. The latter possesses a lattice formulation which preserves many features of this topological structure. We thus conjecture that the lattice theory provides
a non-perturbative regularization for three dimensional quantum gravity - free from the usual problems of path integral approaches to Euclidean quantum gravity.

Please, insert your presentation type (talk, poster)

talk

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Presenter: CATTERALL, simon (Syracuse University)

Session Classification: Parallel 48: Theoretical developments

Track Classification: Theoretical developments