BRST and Dirac Cohomology

Peter Woit

Columbia University

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007 Kemeny Hall, 4:00 pm

(Tea 3:30 pm 300 Kemeny Hall)

Abstract

"BRST" is the name of a calculational technique used by physicists since the 1970s to handle quantum theories with a gauge symmetry. "Dirac cohomology" is a concept recently introduced in representation theory to characterize representations of semi-simple Lie algebras. I'll explain some of the background of both topics, and show that, at least for some of the simplest possible quantum models, they provide very closely related constructions.

This talk should be accessible to graduate students.