Advancement to Candidacy

Daniel Copeland
UCSD

Classification of Lie type tensor categories

Abstract:
Tensor categories have myriad uses in mathematics and physics, for instance they appear as algebraic data associated to topological quantum field theories and provide the framework for topological quantum computation. What are all the tensor categories with given fusion rules? This question can’t be answered in full generality at the moment (by me) but in this talk we discuss the classification of braided tensor categories whose fusion rings are those of the representation rings of classical Lie groups.

Advisor: Hans Wenzl

Tuesday, May 30, 2017
11:00 AM
AP&M 6218