

Meeting: 1003, Atlanta, Georgia, SS 15A, AMS Special Session on Quantum Topology, I

1003-57-1648 **Fernando J. O. Souza*** (fernando-souza@uiowa.edu), Department of Mathematics, 14 MLH, University of Iowa, Iowa City, IA 52242-1419. *Relating categorical invariants of three-manifolds to categorical and Hopf-algebraic features of the three-manifolds themselves.* Preliminary report.

We report on our current efforts to relate some three-manifold invariants that are defined using categories with additional structures (which include categories of representations of some classes of Hopf algebras) to the categorical aspects of three-manifolds, particularly their on-going algebraizations via Hopf-algebra objects. (Received October 05, 2004)