

**Meeting:** 1001, Evanston, Illinois, SS 24A, Special Session on Hopf Algebras at the Crossroads of Algebra, Category Theory, and Topology

1001-18-215      **Louis Crane\*** ([crane@math.ksu.edu](mailto:crane@math.ksu.edu)), Kansas State University Math Department, Manhattan, KS 66506. *Representations of the Poincare 2-Group.*

The Poincare group or any inhomogeneous isometry group has the natural structure of a crossed module, or equivalently of a categorical group. We will work out the structure of its 2-category of continuously indexed representations, and explore applications to quantum physics. (Received August 26, 2004)