1063-19-113   **Daniel A Ramras*** (`ramras@nmsu.edu`), New Mexico State University, Department of
Mathematical Sciences, P.O. Box 30001, Department 3MB, Las Cruces, NM 88003.
Quillen-Lichtenbaum phenomena in stable representation theory.

This talk will describe a variety of results and calculations connecting the stable representation theory of discrete groups
to cohomology and topological K-theory. Stable representation theory refers to the study of finite dimensional (unitary)
representations, after stabilizing with respect to rank. Conjectures of Carlsson relate stable representation theory to
the algebraic K-theory of fields, making our results analogous to the Quillen-Lichtenbaum conjectures. In fact, the
comparison between stable representation theory and topological K-theory exhibits failure in a low dimensional range
precisely analogous to the low dimensional failure of the Quillen-Lichtenbaum conjectures. In the context of stable
representation theory, this low-dimensional failure has a geometric explanation, and has applications to gauge theory.
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