MIT Lie Groups Seminar Wednesday 4:30–5:30, room 2-142

April 3: Lucas Mason-Brown(MIT), The K-types of unipotent representations

Unipotent representations are an important and mysterious class of unitary representations of a real reductive group. In a sense, they are the atoms of unitary representation theory. In a paper from 1991, David Vogan provides a conjectural formula for their K-types. In this talk, I will prove this formula in a large family of cases. The key ingredient is a theory of microlocalization for Harish-Chandra modules, inspired by Ivan Losev's work on W-modules and primitive ideals.