

April 11: Pavle Pandžić (University of Zagreb and Cornell), “Translation principle for Dirac index.”

Unitary Harish-Chandra modules with nonzero Dirac cohomology should play an important role in the classification because they are extremal among all unitary modules in a certain precise sense. In the equal rank case, one can replace Dirac cohomology by its Euler characteristic, or Dirac index. The aim of this talk is to show how the index can vary in a translation family of virtual Harish-Chandra modules. Roughly speaking, if one member of the family has nonzero Dirac index, then so do almost all of the other members. This work was done with Salah Mehdi, following an outline proposed by David Vogan.