
ALEXANDER CARDONA, Universidad de los Andes

Spectral invariants and global pseudo-differential calculus on homogeneous spaces

Global pseudo-differential calculus on compact Lie groups and homogeneous spaces gives, via representation theory, a semi-discrete description of the global analysis and spectral theory of a wide class of operators on these objects. Based on the theory developed by Ruzhansky and Turunen, during this talk we will consider spectral invariants of index type for global homogeneous pseudo-differential operators; some examples and potential applications will be addressed.