Speaker: Clement Dell’Aiera (University of Hawaii at Manoa)

Title: Decomposition complexity, a dynamical approach

Abstract: Finite Decomposition Complexity was introduced by E. Guentner, R. Tessera and G. Yu as a generalization of finite asymptotic dimension. We will investigate how it can be suitably defined for topological actions of discrete groups (more generally topological groupoids), and present some applications in Operator Algebras and K-theory, e.g. one can obtain the Künneth formula for the uniform Roe algebra of some groups which are not coarsely embeddable into Hilbert space. Other applications include the Baum-Connes conjecture.