Speaker: Massoud Amini

Title: Spectral triples and Cantor set

Abstract: We give a report on the recent work of Erik Christensen and Cristina Ivan on the spectral triples for approximately finite dimensional C^*-algebras (AF-algebras), Jour. Oper. Theory 56:1 (2006), 17-46. AF-algebras are direct limits of finite dimensional C^*-algebras (finite direct sums of full matrix algebras) and could be seen as the norm closure of increasing union of such algebras. There is a canonical way to associate a Dirac operator to such an increasing sequence and give the metric on the state space. There is no upper bound to the growth of eigenvalues of the Dirac operator in this case, and in a sense, the lack of such an upper bound, forces the Dirac operator to be acting on an AF-algebra.