CUNTZ-PIMSNER ALGEBRAS, MAPPING CONES AND WEIGHTED LENS SPACES

Francesca Arici

Radboud University, Nijmegen

25 October, 15:30-16:30

Cuntz-Pimsner algebras are universal C*-algebras associated to a C* correspondence and they encode dynamical information. In the case of a self-Morita equivalence bimodule they can be thought of as total spaces of a noncommutative circle bundle. In the first part of the talk I will describe their relation with the mapping cone extension and the corresponding exact sequence. The second part of the talk will focus on a Cuntz-Pimsner model for quantum weighted lens spaces that allows one to compute their K-theory and K-homology groups.