DEPARTMENT OF MATHEMATICS AND COMPUTER SCIENCE UNIVERSITY OF SOUTHERN DENMARK, ODENSE

Mathematics seminar

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Separated graphs and convex subshifts

Thursday 16 March 2017, 14:15-15:15 IMADA seminar room

Abstract

It is easily seen that any subshift (over a finite alphabet) of finite type may be represented as the edge shift of a finite directed graph. Moreover, when viewing any such one-sided subshift as a partial action of the free group on the alphabet, the associated partial crossed product C*-algebra is exactly the corresponding graph C*-algebra. In this talk, we will introduce a wider class of partial dynamical systems called "convex subshifts": the fundamental idea is to give up the linear structure of a sequence and consider data stored in trees instead. We will then define the notion of a finite type convex subshift and indicate why it may represented, up to Kakutani equivalence, as the partial action associated with a so-called separated graph. In particular, the corresponding partial crossed product C*-algebras will be Morita equivalent to tame separated graph C*-algebras. This is joint work with Pere Ara.