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

Mathematics seminar

Selcuk Barlak
IMADA, SDU

Sequentially split *- homomorphisms between C*-algebras

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IMADA seminar room

Abstract

We define and examine sequentially split *-homomorphisms between C*-algebras and C*-dynamical systems;
a notion that can be regarded as an approximate weakening of being a split-injective (and equivariant) inclusion.
Given such a *-homomorphism, a multitude of C*-algebraic approximation properties pass from the target to the domain C*-algebra. In the equivariant setting, this notion behaves well with formation of crossed products, which particularly expresses in a Takai Duality-type result that will be explained in the talk. As an important class of examples, we consider C*-dynamical systems of compact group actions with the Rokhlin property.
We will use this new point of view to see that Izumi's well-known duality result concerning the Rokhlin property and approximate representability for finite abelian group actions extends naturally to the setting of compact abelian group actions. This is joint work with Gábor Szabó.

Host: David Kyed