

THEMATIC SESSION: Operator Algebras

Simplicity of reduced crossed products.

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Results from a few years ago of Kennedy and Schafhauser attempt to characterize simplicity of reduced crossed products, under an assumption which they call vanishing obstruction. However, this is a strong condition that often fails, even in cases of finite groups acting on finite dimensional C^* -algebras. In this work, we give complete C^* -dynamical characterization, of when the crossed product is simple, in the setting of FC-hypercentral groups. This is a large class of amenable groups that, in the finitely-generated setting, is known to coincide with the set of groups with polynomial growth.

This is joint work with Dan Ursu.