Speaker: Aristides Katavolos

Title: Harmonic Operators and Crossed Products.

Abstract: We study the space of harmonic operators for a probability measure µ (or a family of measures) on a group G, as a "quantization" of µ-harmonic (or jointly harmonic) functions on G. This leads to two different notions of crossed products of operator spaces by actions of G which coincide when G satisfies a certain approximation property. The corresponding (dual) notions of crossed products of (co-) actions by the von Neumann algebra of G always coincide.

This is a survey of joint work with M. Anoussis and I.G. Todorov, and of recent work by D. Andreou.