Séminaire d'analyse

Département de mathématiques et de statistique **Université Laval**

Conférencier: Mehrdad Kalantar **Carleton University**

Titre: Harmonic operators on locally compact quantum groups

Date et heure: Le vendredi 17 février, 2012 de 10h30 à 11h20

Lieu: Pavillon Vachon 3840

Résumé: Noncommutative Poisson boundaries of (discrete) quantum groups G was first introduced and studied by Izumi (2002). Motivated by the classical setting, in fact, he defined the Poisson boundary of G associated to a `quantum measure' µ as the space of μ -harmonic operators, i.e., the fixed point space of the Markov operator associated to μ . In this talk, after introducing l. c. quantum groups and Poisson boundaries associated to them, I will present quantum versions of several important classical results on harmonic functions on l.c. groups, including: the Choquet--Deny theorem for compact quantum groups; the characterization of amenability in terms of harmonic operators, and triviality of some special classes of harmonic operators.

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Responsable: Javad Mashreghi