

Department of Mathematics

University of Houston

# Analysis Seminar

Monday, April 24, 2017

14:00-15:00 – Room 646 PGH

**Speaker:** Sergey Neshveyev (University of Oslo)

**Title:** Noncommutative random walks and classification of compact quantum groups of Lie type

**Abstract:** Compact quantum groups are noncommutative generalizations of compact groups. A natural problem, studied by a number of people and explicitly formulated by Woronowicz in the 80s, is how to classify quantum groups with representation theory “looking like” that of a compact Lie group. I will briefly explain a classification result for a large class of such quantum groups. The main goal, however, will be to discuss noncommutative random walks and their Poisson boundaries, which played a crucial role in obtaining the classification result.