

Theoretical Statistics and Mathematics Unit

Monday Colloquium

Date: July 18, 2016

Time: 4:15 PM

Venue: L-Infinity, Stat-Math Unit (5th Floor, A.N. Kolmogorov Bhavan)

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Multiplicative unitaries for locally compact group

Abstract

Given a locally compact group G , there is a unitary operator W acting on the Hilbert space of L^2 -functions of $G \times G$ which not only encodes the group structure on G but also the dual of G (in a generalised sense and coincides with the Pontrjagin dual whenever G is Abelian). The unitary W was known as Kac-Takesaki operator until Baaj and Skandalis used an abstract version of it to axiomatize locally compact quantum groups under the name multiplicative unitaries. The goal of this talk is to present the (re)construction of a classical locally compact group G from W and its dual.

All are cordially invited