

Title:

Going from a classical to a quantum picture: occupation times and Kac's propagation of chaos.

Abstract:

I will talk about two different instances of stochastic processes and their possible conversion to quantum ones. The first one deals with the "proportion of time" that the Hadamard walk ( and other quantum walks on the integers) spend on the positive integers. The second one deals with Mark Kac's program of deriving the non-linear Boltzmann equation from an appropriate limit of n-particle linear Markovian evolutions.