

Minisymposium : Estimation, filtrage, contrôle et simulation de systèmes quantiques :

Graphon quantum filtering system

CHALAL SOFIANE, L2S CentraleSupélec - Paris

Le stand est organisé par Remi Robin (Mines PSL Paris) et Maël Bompais (University of Nottingham) et portera sur "*Estimation, filtrage, contrôle et simulation de systèmes quantiques*".

Abstract : In this talk, we consider a non-exchangeable system of interacting quantum particles subject to continuous measurement. The interaction is of mean-field type. We derive a new limiting quantum graphon system, study its well-posedness, and establish a propagation of chaos result for multiple Bosonic systems with blockwise interactions. We then discuss applications to quantum optimal feedback control and stabilization.

This work is in collaboration with : Hamed Amini (Florida University), Nina Hadis Amini (L2S, CentraleSupélec), and Gaoyue Guo (MICS, CentraleSupélec).

Références

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