

GRADUATE SEMINAR

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Classification of Quantum Dynamical Semigroups up to Cocycle Conjugacy

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3:30 p.m.

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Abstract: Quantum dynamical semigroups (QDS) are weak*-continuous one-parameter semigroups of unital, normal completely positive maps acting on the algebra $B(H)$ of all bounded linear operators on a Hilbert space H . In this presentation, I will introduce and discuss several properties of QDS, and provide a possible approach to their classification up to cocycle conjugacy. This classification is mainly based on the classification of E_0 -semigroups up to cocycle conjugacy through product systems.