LI GAO, Technical University of Munich Complete logarithmic Sobelev inequalities

Quantum Markov semigroups are noncommutative generalization of Markov process, which models the time evolution of dissipative open quantum systems. For both classical and quantum Markov semigroups, modified log Sobolev inequality serves as a powerful tool to study the convergence property via the exponential decay of entropy. In this talk, I'll present some recent progress on complete bounded versions of modified log-Sobelev inequalities for finite dimensional quantum Markov semigroups. This talk is based on a joint work with Cambyse Rouze.