Tuesday, July 7, 2020, at 10:00 (Boston)
15:00 (UK/Eire)   16:00 (C.Europe)   22:00 (China)

Mathematical Picture Language Seminar
Zoom at: https://harvard.zoom.us/j/779283357

Decay estimates and complete Bakry-Emry theory

Marius Junge, University of Illinois at Urbana-Champaign

Abstract: The connection between decay estimates for entropy and logarithmic Sobolev inequalities is well-established for dynamical systems on commutative systems. I will explain how to extend this to matrix-valued functions, and then apply these techniques to Lindbladians on quantum systems interacting with an environment. In fact, some Lindbladian on small quantum systems seems to contain all the relevant information of dynamical systems on groups. This is joint work with Haojian Li and Nick LaRacuente.