



THE WEIZMANN INSTITUTE OF SCIENCE  
FACULTY OF MATHEMATICS AND COMPUTER SCIENCE  
Geometric Functional Analysis and Probability Seminar

Room 155 ,Ziskind Building  
on Thursday, Dec 20, 2018  
at 13:30

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Stability in the Bakry-Emery theorem

Abstract:

The Bakry-Emery theorem asserts that uniformly log-concave probability measures satisfy certain functional inequalities, with constants that are better than those associated with the Gaussian measure. In this talk, I will explain how if the constant is almost that of the Gaussian, then the measure almost splits off a Gaussian factor, with explicit quantitative bounds. The proof is based on a combination of Stein's method and simple arguments from calculus of variations. Joint work with Thomas Courtade.