

# "Metastability in systems with bifurcations"



Friday, March 13, 2:30 pm  
Pickard Hall, Room 487

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## Abstract:

The overdamped motion of a Brownian particle in a potential landscape with multiple wells is known to exhibit metastability: For weak noise, transitions between potential minima occur on exponentially long time scales. The small-noise asymptotics of transition times is usually described by the Eyring-Kramers formula. However, this formula breaks down when the potential landscape undergoes bifurcations and saddles become flat. We will show how recent results by Bovier, Eckhoff, Gaynard and Klein, providing the first rigorous proof of the Eyring-Kramers formula, can be extended to cases with flat saddles.

This is joint work with Nils Berglund (Orlèans)

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The Math Department will provide refreshments 30 min. prior to the presentation.