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

Room 290C ,Ziskind Building
on Thursday, Jan 19, 2017at 11:15

Jay Rosen CUNY

Tightness for the Cover Time of S^2

Abstract:

Let M be a smooth, compact, connected two-dimensional, Riemannian manifold without boundary, and let C_epsilon be the amount of time needed for the Brownian motion to come within (Riemannian) distance epsilon of all points in M. The first order asymptotics of C_epsilon as epsilon goes to 0 are known. We show that for the two dimensional sphere

\sqrt{C_epsilon}-2\sqrt{2}\(\log \epsilon^{-1}- \frac{1}{4}\log\log \epsilon^{-1}\) is tight.

Joint work with David Belius and Ofer Zeitouni.

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