מכון ויצמן למדע

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, 2017
at 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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