

JOINT DIFFERENTIAL GEOMETRY/PDE AND PROBABILITY SEMINAR

WEDNESDAY, JANUARY 12, 2005

PADEL FORD C-36

3:50 PM

Robin problem and Ray-Knight theorem

KRZYSZTOF BURDZY
(UW)

The "Robin problem" or the "third boundary problem" is a mathematical model for the flow of a substance (or heat) out of a domain through a semi-permeable membrane. I will address the question of when the concentration of the substance (or the temperature) is bounded below by a constant over the whole domain. The argument is based in part on a very non-trivial (although old) result known as "Ray-Knight theorem". It describes the distribution of the local time of Brownian motion as a function of the space variable.

Joint work with Rich Bass and Zhenqing Chen.

For more information about this seminar, visit the DG/PDE Seminar Web page (from the Math Department home page, www.math.washington.edu, follow the link **Seminars, Colloquia, and Conferences**).

The University of Washington is committed to providing access, equal opportunity and reasonable accommodation in its services, programs, activities, education and employment for individuals with disabilities. To request disability accommodation contact the Disability Services Office at least ten days in advance at: 206-543-6450/V, 206-543-6452/TTY, 206-685-7264 (FAX), or dso@u.washington.edu.