

TEMPLE UNIVERSITY

Department of Mathematics

Analysis Seminar

Room 617 Wachman Hall

Monday, March 30, 2014, 2:40 p.m.

Wiener-type tests for evolution equations

by G. Tralli

Department of Mathematics
University of Bologna

In this talk I will discuss Wiener-type criteria of regularity of boundary points for some hypoelliptic diffusion operators. The main assumptions are Gaussian bounds of the fundamental solution with respect to a distance satisfying doubling condition and segment property. Under a suitable parabolic exterior cone-condition, I will also show Holder estimates at the boundary for the solutions to the relevant Dirichlet problem. This is a joint work with E. Lanconelli and F. Uguzzoni.