$S_t \circ c(h)(a_s)_{ti}c(s) + \mathfrak{S}_e m^i n(a_r)$ Department of Mathematics, University of Utah



On a cancellation property of sigma-finite measures with applications to inverse problems for regular variation of linear filters and identification of stable laws.

Jan Rosinski

University of Tennessee

Time and Place: Friday April 11, 2008; 3:00-4:00 p.m.; LCB 219

A group of problems leads to consideration of a multiplicative convolution equation for sigma-finite measures. That includes inverse problems for regular variation of linear filters and of products of independent random variables, as well as identification of stable random measures from their stochastic integrals. Our problem is related to the existence of nontrivial unbounded solutions of the Deny-Choquet equation and is solved by methods of generalized functions. We also develop techniques to resolve problems in applications mentioned above. This talk is based on a joint work with M. Jacobsen, T. Mikosch, and G. Samorodnitsky.