COLLOQUIUM

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Fractional Elliptic, Hyperbolic and Parabolic Random Fields

Thursday, April 21, 2011 A405 Wells Hall 10:20 a.m. - 11:10 a.m. Refreshments: 10:00 a.m.

Abstract

This is a joint paper with M.S. Taqqu (Boston University) and M.D. Ruiz-Medina (University of Granada, Spain).

We introduce a new class of fractional and multifractional random fields arising from elliptic, hyperbolic and parabolic equations with random innovations derived from fractional Brownian motion. The case of stationary random intitial conditions is also considered for parabolic and hyperbolic equations as well as their fractional interpolation.

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