THREE SERIES OF TALKS ON NEW DEVELOPMENTS IN PARTIAL DIFFERENTIAL EQUATIONS

PIMS / AMI / PDE Seminar

TALK 1

Friday, November 15, 2013
3:00 p.m.
CAB 657

"Some mathematical questions with anomalous diffusion"

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Abstract

I will describe in this talk some mathematical problems related to anomalous diffusion. Such a diffusion is driven by Levy processes, i.e. stochastic processes with jumps. At the PDE level, it gives a fractional laplacian, in the simplest case. Such operators arise in problems of dislocations in mechanics, fluid mechanics, porous media equations, etc...I will describe some of these models and will try to give some hints on how to treat them mathematically.

Refreshments will be served in CAB 649 at 2:30 p.m.