



WPI HAROLD J GAY LECTURE SERIES

PDEs and Fractals

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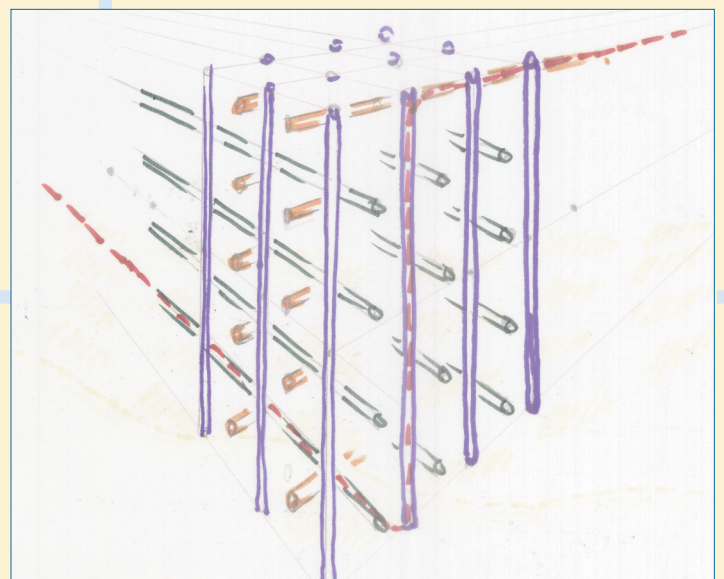
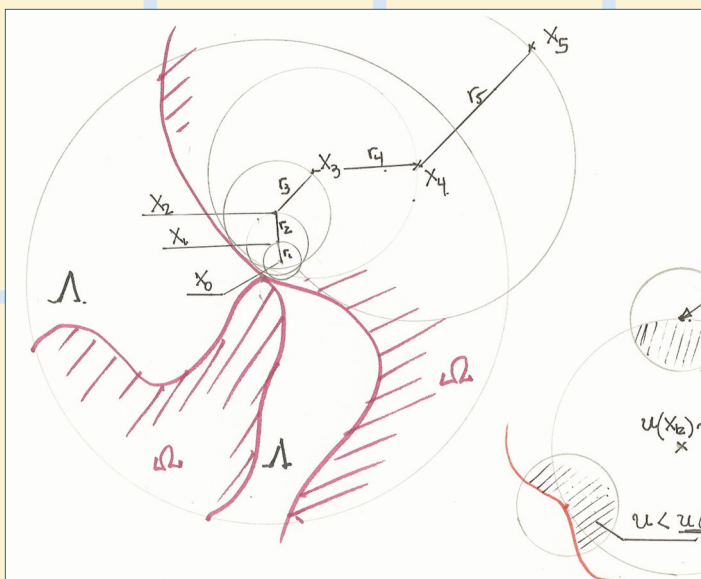
The Mathematical Idea of Diffusion



Monday, February 11, 2013
2pm, Bartlett Center

ABSTRACT I will discuss and review the many mathematical phenomena that can be considered a "diffusion process" from the classical heat diffusion and Brownian motion, to geometric configurations, like movement by mean curvature, free boundaries and surface diffusion.

Geometry with its applications has been at the heart of the development of partial differential equations and boundary value problems since the very beginning. In physics, biology, economics, and other applied fields, a variety of new problems are now emerging that display unusual geometrical, analytical and scaling features, possibly of fractal type. The objective of these lectures is to acquire the view of outstanding mathematicians on the subject of differential equations and fractals, and their developments and applications, in a broad perspective encompassing both classical highlights and contemporary trends.



Sponsored by WPI and hosted by the Department of Mathematical Sciences

Coffee and tea available before lecture time in Stratton Hall 107

Participation of faculty and students is most welcome

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