NANYANG TECHNOLOGICAL UNIVERSITY

LECTURE ANNOUNCEMENT

Convexity: ideas, analysis, and applications

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Date : **30 October 2009 (Friday)**
Time : **4 pm – 5 pm**
Venue: **SPMS-Executive Classroom 1, MAS-03-06**
School of Physical and Mathematical Sciences

Convexity is a simple and ancient concept that can be easily explained to non-mathematicians. Yet it is perfectly fitted for treatment by the powerful tools of mathematical analysis, and it is still the subject of deep research. In this lecture, we will start with a graphical description of convexity, and then study its main properties using mostly pre-calculus tools. At the end of the lecture, we will present some applications of convexity, including an unexpected consequence of the convex separation theorem in financial arbitrage trading.

Speaker Biography

Dr Nicolas PRIVAULT received his PhD in probability in 1994 from the University of Paris VI. He has held a number of visiting and long term appointments in Europe, Asia, and the Americas, and is currently an Associate Professor at City University of Hong Kong. His research interests are in stochastic analysis, including stochastic calculus, stochastic inequalities, statistical estimation, probabilistic methods for PDEs, and applications to finance and insurance. He has tutored over 10 PhD students and is the author of 90 refereed publications including two recent books, on stochastic analysis and on interest rate modeling, published by Springer-Verlag and World Scientific respectively.

Host: Prof. Bernhard Schmidt, Deputy Head, Division of Mathematical Sciences, School of Physical and Mathematical Sciences

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