INTER-FACULTY WORKSHOP ON FINANCIAL MATHEMATICS

Saturday, 12 January 2002
Seminar Room, Institute for Mathematical Sciences
House 3, Prince George's Park, National University of Singapore
http://www.ims.nus.edu.sg/location.htm
(The Institute is about 50 meters away from the NUS Internal Shuttle Bus Terminal for Bus A1 and A2.)

9:00 – 9:30   Registration

9:30 – 9:35   *Opening address* by **Louis CHEN**
Professor Chen is Director of the newly founded Institute for Mathematical Sciences. He was President of the Bernoulli Society and is an elected Fellow of the Third World Academy of Sciences. He won the Excellence for Singapore Award in 1997 and the National Science and Technology Award in 1991.

9:35 – 10:00   "*Quadratic Hedging for Interest Rates Models with Stochastic Volatility*" by **Francesca BIAGINI**
She obtained her Ph.D in 2001 and is currently Assistant Professor of Mathematics at University of Bologna in Italy. She has published papers in *Mathematical Finance* and *Journal of Applied Probability*.

10:00 – 10:25   "*Modeling Large Diversified Portfolios in a Jump-Diffusion Market*" by **LIU Xiaoqing**
He has worked in City University of Hong Kong, NUS and SMU. He is currently a Fellow in the Mathematics Department of NUS. His research interests include numerical PDE and SDE, and mathematical finance.

10:25 – 10:35   "*Differential Geometry in Incomplete Markets*" by **GAO Yuan**
He won the Leong Teng Kiang Memorial Prize in mathematics in NUS in 1997. He then worked in DBS for 4 years on risk management and trading software systems. He is currently a Ph. D student in CFE, NUS.

10:35 – 11:00   "*Mean Variance versus Expected Utility in Dynamic Investment Analysis*" by **ZHAO Yonggan**
He obtained his Ph.D from University of British Columbia and is currently Assistant Professor of Finance at Nanyang Technological University. He has papers in *Journal of Risk* and *Mathematical Programming*.

11:00 – 11:25   Tea Break

11:25 – 11:50   "*Incorporating Market Frictions into Asset Prices*" by **Mitchell WARACHKA**
He is Assistant Professor of Finance at Singapore Management University. This paper is his joint work with Cetin, Protter and his former Ph.D supervisor Robert Jarrow, who is famous for the HJM model.

11:50 – 12:00   "*High-accuracy PDE Method for Financial Derivative Pricing*" by **ZHAO Shan**
He is a Ph.D student in the Computational Science Department of NUS. He has worked on computational finance and computational electromagnetic and has written several papers in these areas.

12:00 – 12:25   "*Bayesian Risk Measures for Derivatives via Random Esscher Transform*" by **SIU Tak Kuen**
He obtained his Ph.D from University of Hong Kong and is currently Assistant Professor of Mathematics at NUS. He has published several papers in the areas of mathematical finance and insurance mathematics.

12:25 – 12:35   "*The Term Structure of Interest Rates as a Random Field*" by **Ricky WONG**
He obtained M.S. in Mathematical Finance at University of Essex. He then worked in Republic National Bank of New York and in J.P. Morgan Chase& Co. He is currently a Ph.D student in Mathematics at NUS.

12:35 – 13:00   "*Stochastic Control with Partial Observation and Applications to Finance*" by **Bernt ØKSENDAL**
He is Professor of Mathematics at University of Oslo in Norway, and currently a visiting Professor in Department of Mathematics and Center for Financial Engineering of NUS. He was President of the Norwegian Mathematical Society and is a member of the Norwegian Academy of Science and Letters.