



'Lunch at the Lab' Finance Seminar's Plans for Winter 2012

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Happy New Year for All of You!

Welcome to our 'Lunch at the Lab'

Winter 2012 Finance Seminar!

I'd like to introduce our new international Ph. D. student: **Giovanni Salvi** (University of Rome 'La Sapienza', Rome, Italy).

His research topic: *'Financial Levy models with semi-Markov regime-switchings'*

Call for Talks this Winter 2012

'Winter, Spring, Summer or Fall

All you have to do is Call'

Carol King 'You've Got a Friend', EMI Music Inc.

Info: PRMIA Calgary Chapter Event

- PRMIA Calgary Chapter Event, May 8, 2012, Bankers Hall, Downtown Calgary:
- Grad Students in Math Finance Research Presentations (3)

Grad Students Research Presentation to the PRMIA Calgary Chapter Steering Committee

- April 12 (Thu) 2012: Probably 12-2pm.
- 6 or 8 students will be selected based on their presentations in the Lab

Fall 2011 Grad Students Presentations-Many Thanks to All of You!

- W. Devauld
- E. Negahdary
- K. Zhao
- A. Gezahagne
- N. Vadori
- W. Bo
- L. Steinrucke
- P. Obour
- M. Couch
- D. Ramarimbahoaka
- Y. Liu

Schedule: Winter 2012

- January 26 (Thu)-Prof. Gordon Talk (Haskayne)
- February 3(Fri)-Prof. Tom Hurd (McMaster U)
- February 9 (Thu)-Nelson Vadori
- February 16 –Babacar Seck
- March 1-Kaijie Cui
- March 8-LiFeng Zhang
- April 5-A. Shahmoradi
- March 15, 22

**Prof. Gordon Sick's Talk (Jan 26, Thu,
12pm, Scurfield Hall 362, Haskayne)**

- **Topic: Using Streaming Market Data
from Bloomberg and Thomson
Reuters Terminals**

Prof. Gordon Sick's Talk (Jan 26, Thu)

- Abstract: The Haskayne School has installed a lab of 18 student stations and one instructor station with streaming data feeds that are popular in industry: Bloomberg (10 stations) and Thomson Reuters Eikon (8 stations). Access to the lab is by ID Card, and students and Faculty can apply for use of the Lab. Access policy hasn't been settled, but there is intent that the lab should be available to Mathematical Finance students, through referral from Tony Ware or Anatoliy Swishchuk.
- These streaming data machines provide screens of market news and commentary (filtered by topic of interest), quotes in a broad variety of exchange-traded (TSX, NYSE, CME, NYMEX, NASDAQ, CBOE) and OTC markets (FX), and some analytics, such as implied volatility surfaces.
- Both Bloomberg and Eikon feeds set up an Excel menu that allows one to structure live DDE links to live data and historic data. One can download high-frequency tick data (bid, ask, size and trade), as well as daily data for a variety of markets.

Prof. Gordon Sick's Talk (Jan 26, Thu)

- This workshop will review:
 - how to log into these services
 - what data is available
 - how to build spreadsheets that harvest the data.

**Prof. Tom Hurd's Talk (Feb 3, Fri, 2pm,
Haskayne, room-TBA)**

- ***Modelling financial networks and systemic risk***

Prof. Tom Hurd's Talk (Feb 3, Fri, 2pm)

- **Abstract:** The study of "contagion" in financial systems, that is, the spread of defaults through a system of financial institutions, is very topical these days. In this talk I will address how mathematical models can help us understand systemic risk. After reviewing the basic economic picture of the financial system as a random graph, I will explore some useful "deliberately simplified models of systemic risk"

Nelson Vadori's Talk: Feb 9

- **Title: Smiling for the Delayed Volatility Swaps**

Nelson Vadori's Talk: Feb 9

- The talk is based on our paper submitted to the Wilmott Magazine
- Abstract: Using change of time method, we derive a closed-form formula for the volatility swap in an adjusted version of the Heston model with stochastic volatility with delay. The numerical result is presented for underlying EURUSD on September 30th 2011. The novelty of the paper is two-fold: application of change of time method to the delayed Heston model and calculation of the volatility swap for this model.

Babacar Seck's Talk: Feb 16

- **Title: Taking Market Risk into Account in Portfolio Optimization**

Babacar Seck's Talk: Feb 16

Abstract:

- We provide an economic interpretation of the practice consisting in incorporating risk measures as constraints in portfolio optimization problem. For what we call the infimum of expectations class of risk measures, we show that if the decision maker maximizes the expectation of a random return under constraint that the risk measure is bounded above, he then behaves as a “generalized expected utility maximizer”. As an application, we make the link between a portfolio maximization problem, subject to Conditional Value-at-Risk being less than a threshold value, and a non-expected utility formulation involving “loss aversion”-type utility functions.

Kaijie Cui's Talk: Mar 1

- **Title: Weather Derivatives with Applications to Canadian Data**

LiFeng Zhang's Talk: Mar 8

- **Title: Geometric Markov Renewal Processes and Their Applications in Finance**

Elham Negahdary's Talk: March 29

- **Title: TBA**

A. Shahmoradi's Talk: April 5

- **Topic: US North East and Ontario Power**

You are very welcome to give a talk!

- Available dates:
- March 15
- March 22
- We have 2 spots but the talks could be 30min or 15 min to involve more students who want to participate

The End

- Thank you for your Attention and Time!



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