



# FSRM Newsletter

## From the FSRM Director

Welcome to the fourth issue of the FSRM newsletter! We have reached a very busy and intense phase of the program cycle. As the spring semester comes to an end, rather than “winding down” activity has become “fast and furious”. As you finish projects, prepare for exams, go on interviews and, in some cases, prepare for the FRM exam you need to keep in mind that you are also preparing for a successful career in an industry that is always pushing for the next innovation but where reward is commensurate with the demands. Also, the nice Spring weather that we have been enjoying is a harbinger that the semester is almost over and that you can soon go on to enjoy a different kind of experience and a change of pace in your internships after taking a well-deserved short break.

I would also like to welcome the new Associate Director, Dr. Neville O’Reilly, who has come on board to help market the program and manage our external relationships.

Please keep the news and feedback coming in.



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## Appointment of Associate Director



In February, Dr. Neville O’Reilly joined the FSRM program staff as the Associate Director. Dr. O’Reilly has held senior management positions in marketing, finance and operations in the telecommunications and enterprise software industries, and has extensive experience in private equity valuation, capitalization and transfer of assets in these industries. Dr. O’Reilly has a Ph.D. in Mathematical Statistics from Columbia University and taught in the Statistics Department at Rutgers before moving into industry.

In his role as Associate Director, Neville O’Reilly will focus on marketing the program to those who seek a Master Degree certification to pursue a career in quantitative finance, as well as to institutions and to those institutions that need the skills and capabilities of

the program's interns and graduates. He will also work with Career Services to enhance the job seeking skills of individual students and enlarge the scope of opportunities available to interns and graduates. "I am excited to be working to promote this leading edge program to students looking to leverage their quantitative skills into a career in financial services and to institutions who are seeking to mine and use data for competitive advantage and to serve their clients better. At times like this, in particular, when yields are low and uncertainty is high, there is a strong demand for the skills that FSRM training provides....and these times could be with us for a long time."

## Addition of Student Gallery



A student gallery has been added to the web site and will be "turned on" for public access before the end of April. "A student gallery allows recruiters and potential students to have a more visceral connection with the program than simply reviewing descriptive program material however skillfully crafted. It adds a more personal 'people component'. Also, by having

their own page with their own photos and bios, students can allow their individuality to show thru but in the overall context of being a Masters candidate in a professional program", commented Dr.O'Reilly

## Financial Statistics Seminars



On March 22, Per Mykland, Robert M. Hutchins Distinguished Service Professor, Department of Statistics, The University of Chicago, and one of the distinguished members of our advisory board, gave a talk on dealing with microstructure noise in making statistical inferences about the price and volatility behavior of high frequency data. Microstructure noise is the component of high frequency data that causes deviation from fundamental value behavior because of the behavior of the market under consideration, e.g. bid-ask bounce, the discreteness of price change, latency etc. Controlling for the market microstructure noise that is prevalent at high frequency has become a key issue for quantitative finance in the study of high frequency data.



On March 29, Dr. Ionut Florescu, Assistant Professor, Stevens Institute of Technology, talked about determining option prices when the underlying asset prices are modeled by continuous time stochastic volatility processes. He also provided approximating methods using trees and discussed extensions to accommodate jumps.

The Thursday lunch time reading group has focused on reviewing the research into validating the effectiveness (or otherwise) of time honored Wall Street technical, “charting” or “rule of thumb” strategies. For example on April 5th the group discussed the findings in the paper Andrew W. Lo & Harry Mamaysky & Jiang Wang, 2000. "Foundations of Technical Analysis: Computational Algorithms, Statistical Inference, and Empirical Implementation," Journal of Finance, American Finance Association, vol. 55(4), pages 1705-1770, 08. The underlying difficulties in applying technical analysis or in testing whether technical analysis produces superior trading strategies were discussed. In particular the problem of coming up with a statistical method or methods to identify a technical pricing pattern in historical data was found to be particularly vexing.

In the next session, the findings of research into the effectiveness of pairs trading will be discussed.

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## Visits to Comrise Technologies

Over the past month several students have visited with Comrise Technologies, a local New Jersey managed services provider and partner of Lexis Nexis in the use of their HPCC platform for “Big Data” to learn about opportunities in this burgeoning area of data analysis. HPCC is a software framework for processing highly distributable problems across huge data sets using a large number of computers (nodes), collectively referred to as a cluster. Computational processing can occur on data stored either in a filesystem (unstructured) or database (structured). Several students will be trained in the use of ECL, the query language used for processing on HPCC.

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## Events Past and Forthcoming

**FSRM Open House:** An open house was held on March 6 to provide prospective applicants to the FSRM program starting in fall 2012 with the opportunity to learn more about this exciting option for a Masters certification in quantitative finance. They were able to listen to a short presentation on the program, have their questions about the program answered and to interact with faculty and current students. Several attendees have since submitted applications to the program.

April brought the following two career oriented events to students looking for a quantitative career in Financial Services, viz.

**The Road to Wall Street: Analyze Your Options** was a half-day event held on Friday, April 13. It feature industry practitioners talking about how they got into the options industry, how that industry is evolving and where in it the career opportunities lie. The event ended with a presentation by a CFA on planning for a career in the investment industry and what to expect in getting a CFA.

**“How I Became a Quant”: Financial Engineers Give a Personal View of Their Careers** will be held on April 19 at Fordham University in New York. This panel discussion is designed to give students a personal view of the world of quantitative finance from the point of view of quantitative finance professionals with varying specialties. The reception after the event provides an opportunity for students to interact with the panelists.

**New Jersey Collegiate Career Day** will be held on May 30 at the Rutgers Student Center. The event will host 150 employers with full time jobs and internships.

**Modeling High Frequency Data in Finance:** This conference, the fourth in an ongoing annual series, will be held at Stevens Institute of Technology between July 19 and July 22. The goal of the conference is “to present the latest developments in the field of modeling data sampled with high frequency.” Additional information about attendance or participating as a speaker can be found at <http://kolmogorov.math.stevens.edu/conference2012/>.

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[Input, comments and suggestions are welcome](#)

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