

# SIAM Conference on Financial Mathematics & Engineering



*Includes updated room assignments as of May 2019*



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## Tuesday, June 4

## Tuesday, June 4

## Wednesday, June 5

7:30 AM - 5:30 PM

Registration  
Myhal Atrium

8:30 AM - 10:30 AM

**Concurrent Sessions****MT1** Machine Learning in Finance

Myhal Auditorium (Room 150)

**MT2** Monte Carlo Methods for Tail Risks

Room 360

**CP1** Stochastic Simulation and Estimation

Room 315

**CP2** Financial EconometricsRoom 330 **430****CP3** Portfolio Selection and Credit ContagionRoom 380 **440**

10:30 AM - 11:00 AM

Coffee Break  
Myhal Atrium

11:00 AM - 11:10 AM

Welcome Remarks  
Myhal Auditorium (Room 150)

11:10 AM - 11:55 AM

**IP1** Market Microstructure Invariance: A Dynamic Equilibrium Model

Albert S. Kyle, University of Maryland, U.S.

Myhal Auditorium (Room 150)

11:55 AM - 1:25 PM

Lunch Break  
Attendees on their own

1:25 PM - 2:55 PM

**Concurrent Sessions****Industrial MS1:** Derivatives Valuation and Risk Management

Myhal Auditorium (Room 150)

**Industrial MS2:** Advances in Machine Learning and Systemic RiskRoom 360 **330**

2:55 PM - 3:25 PM

Coffee Break  
Myhal Atrium

3:25 PM - 4:25 PM

**PD1** Panel on Systemic Risk and Financial Stability  
Myhal Auditorium (Room 150)

4:25 PM - 4:40 PM

Intermission

4:40 PM - 5:40 PM

**PD2** Panel on Fin Tech and AI  
Myhal Auditorium (Room 150)

5:40 PM - 6:25 PM

**IP2** Latency in Electronic Markets  
Alvaro Cartea, University of Oxford, United Kingdom

Myhal Auditorium (Room 150)

6:25 PM - 6:40 PM

Intermission

6:40 PM - 8:40 PM

**PP1** Networking/Welcome Reception and Poster Session  
Fields Atrium

## Wednesday, June 5

8:00 AM - 6:45 PM

Registration  
Myhal Atrium

8:30 AM - 10:30 AM

**Concurrent Sessions****MS1** Machine Learning - Part I of III

Myhal Auditorium (Room 150)

**MS2** Robust Finance and Optimal Transport - Part I of II

Room 360

**MS3** Mean Field Models in Mathematical Finance - Part I of III

Room 315

**MS4** Systemic Risk: Stochastic Games, Policies, and Economic Incentives - Part I of IIRoom 330 **440****MS5** Quantitative Methods in Insurance Market Modelling - Part I of IIRoom 380 **490****MS6** New Developments on Optimization under Time-Inconsistency

Room 320

**CP4** Credit RiskRoom 350 **2159 (Bahen Centre)****CP5** Portfolio SelectionRoom 370 **2179 (Bahen Centre)**

10:30 AM - 11:00 AM

Coffee Break  
Myhal Atrium

11:00 AM - 11:15 AM

SIAG/FME Early Career Prize Ceremony  
Myhal Auditorium (Room 150)

11:15 AM - 12:00 PM

**IP3** Reservoir Computing, Rough Paths and Learning of Stochastic Dynamics in Finance  
Josef Teichmann, ETH Zürich, Switzerland  
Myhal Auditorium (Room 150)

12:00 PM - 1:30 PM

Lunch Break  
Attendees on their own

1:30 PM - 3:30 PM

**Concurrent Sessions****MS7** Machine Learning - Part II of III

Myhal Auditorium (Room 150)

**MS8** Robust Finance and Optimal Transport - Part II of IIRoom 360 **380****MS9** Mean Field Models in Mathematical Finance - Part II of III

Room 315

**MS10** Systemic Risk: Stochastic Games, Policies, and Economic Incentives - Part II of II

Room 330

**MS11** Quantitative Methods in Insurance Market Modelling - Part II of IIRoom 380 **490****MS12** Dynamic Equilibrium Models

Room 320

**CP6** Cyber Risk, News, and Rough PathsRoom 350 **440****CP7** Optimal Control with Applications to Investing and TaxationRoom 370 **2159 (Bahen Centre)**

3:30 PM - 4:00 PM

Coffee Break  
Myhal Atrium

4:00 PM - 6:00 PM

## Concurrent Sessions

**MS13** Machine Learning - Part III of III

Myhal Auditorium (Room 150)

**MS14** Robust Methods in FinanceRoom 360 **380****MS15** Mean Field Models in Mathematical Finance - Part III of III

Room 315

**MS16** New Directions in Credit Modeling - Part I of II

Room 330

**MS17** Portfolio ChoiceRoom 380 **490****MS18** New Developments in Markov Chain

Approximation for Financial Mathematics

Room 320

**CP8** Stochastic VolatilityRoom 350 **440****CP9** Limit Order Books and Model RiskRoom 370 **2159 (Bahen Centre)**

6:00 PM - 6:15 PM

Intermission

## Wednesday, June 5

6:15 PM - 7:00 PM

**IP4** Managing the Libor Transition: A Quant Perspective  
*Fabio Mercurio, Bloomberg LP, U.S.*  
*Myhal Auditorium (Room 150)*

## Thursday, June 6

8:00 AM - 6:30 PM

Registration  
*Myhal Atrium*

8:30 AM - 10:30 AM

**Concurrent Sessions**

**MS19** Machine Learning and Reinforcement Learning in Finance  
*Myhal Auditorium (Room 150)*

**MS20** Quantitative Risk Management  
*Room 360*

**MS21** Network and Mean-Field Models in Systemic Risk - Part I of II  
*Room 315*

**MS22** New Directions in Credit Modeling - Part II of II  
*Room 330 1180 (Bahen Centre)*

**MS23** Modern Portfolio Optimization Problems - Part I of II  
*Room 380 430*

**CP10** Computational Finance  
*Room 320*

**CP11** Rough Volatility  
*Room 350 440*

**CP12** Systemic Risk  
*Room 370 490*

10:30 AM - 11:00 AM

Coffee Break  
*Myhal Atrium*



11:00 AM - 11:45 AM

**IP5** On Fairness of Systemic Risk Measures  
*Jean-Pierre Fouque, University of California, Santa Barbara, U.S.*  
*Myhal Auditorium (Room 150)*

11:45 AM - 1:15 PM

Lunch Break  
*Attendees on their own*

1:15 PM - 3:15 PM

**Concurrent Sessions**

**MS24** Algorithmic Trading  
*Myhal Auditorium (Room 150)*

## Thursday, June 6

**MS25** Curse of Dimensionality in Quantitative Finance - Part I of II  
*Room 360*

**MS26** Network and Mean-field Models in Systemic Risk - Part II of II  
*Room 315*

**MS27** Post-Crisis Financial Mathematics: Counterparty Risk, Funding and Central Counterparties  
*Room 330 1180 (Bahen Centre)*

**MS28** Modern Portfolio Optimization Problems - Part II of II  
*Room 380 430*

**CP13** Portfolio Optimization  
*Room 320*

**CP14** Mean-Field Games  
*Room 350 440*

**CP15** Machine Learning in Finance I  
*Room 370 490*

3:15 PM - 3:45 PM

Coffee Break  
*Myhal Atrium*



3:45 PM - 5:45 PM

**Concurrent Sessions**

**MS29** Recent Advances in Fractional Volatility Models  
*Myhal Auditorium (Room 150)*

**MS30** Curse of Dimensionality in Quantitative Finance - Part II of II  
*Room 360*

**MS31** Systemic Risk: Sourcing, Measuring, and Allocation  
*Room 315*

**MS32** New Challenges and Mathematical Models in Energy and Commodity Markets - Part I of III  
*Room 330 1180 (Bahen Centre)*

**MS33** Portfolio Selection Driven by Behavioral Finance Studies  
*Room 380 430*

**CP16** Optimal Stopping and Price Design  
*Room 320*

**CP17** Optimal Control and Utility Maximization  
*Room 350 440*

**CP18** Machine Learning in Finance II  
*Room 370 490*

5:45 PM - 6:00 PM

Intermission

6:00 PM - 6:45 PM

**IP6** New Trends in Optimal Execution  
*Charles-Albert Lehalle, Capital Fund Management, France*  
*Myhal Auditorium (Room 150)*

6:45 PM - 7:00 PM

Intermission

## Thursday, June 6

7:00 PM - 8:00 PM

SIAG/FME Business Meeting  
*Myhal Auditorium (Room 150)*  
*Complimentary refreshments will be served.*



## Friday, June 7

8:00 AM - 1:30 PM

Registration  
*Myhal Atrium*

8:30 AM - 10:30 AM

**Concurrent Sessions**

**MS34** Numerical Methods and Machine Learning for Finance - Part I of III  
*Myhal Auditorium (Room 150)*

**MS35** High-frequency Driven Methods: Econometrics, Liquidity, Algorithmic Trading - Part I of III  
*Room 360*

**MS36** Central Counterparties (CCPs) - Part I of III  
*Room 315*

**MS37** New Challenges and Mathematical Models in Energy and Commodity Markets - Part II of III  
*Room 330*

**MS38** Topics in Portfolio Optimization  
*Room 380 430*

**CP19** Stochastic Control and Optimization Problems in Financial Mathematics  
*Room 320*

**CP20** Stochastic and Dynamic Equilibrium  
*Room 350 440*

**CP21** Backward SDEs and Portfolio Problems  
*Room 370 490*

10:30 AM - 11:00 AM

Coffee Break  
*Myhal Atrium*



11:00 AM - 11:45 AM

**IP7** Rough Covariance Modeling  
*Christa Cuchiero, Vienna University of Economics and Business, Austria*  
*Myhal Auditorium (Room 150)*

11:45 AM - 1:15 PM

SIAG/FME Conference Paper Prize Session  
*Myhal Auditorium (Room 150)*

11:45 AM - 1:15 PM

Lunch Break  
*Attendees on their own*

Friday, June 7

Friday, June 7

1:15 PM - 3:15 PM

**Concurrent Sessions****MS39** Numerical Methods and Machine Learning for Finance - Part II of III*Myhal Auditorium (Room 150)***MS40** High-Frequency Driven Methods: Econometrics, Liquidity, Algorithmic Trading - Part II of III*Room 360***MS41** Central Counterparties (CCPs) - Part II of III  
*Room 315***MS42** New Challenges and Mathematical Models in Energy and Commodity Markets - Part III of III*Room 330***MS43** Applied Portfolio Optimization*Room 380***CP22** Dynamic Approach to Principal-Agent Problem*Room 320***CP23** Risk Incentives, Levy Models, and Fake News*Room 350 440***CP24** Dependence Modeling*Room 370 490*

3:15 PM - 3:45 PM

Coffee Break

*Myhal Atrium*

3:45 PM - 5:45 PM

**Concurrent Sessions****MS44** Numerical Methods and Machine Learning for Finance - Part III of III*Myhal Auditorium (Room 150)***MS45** High-Frequency Driven Methods: Econometrics, Liquidity, Algorithmic Trading - Part III of III*Room 360***MS46** Central Counterparties (CCPs) - Part III of III  
*Room 315***MS47** New Trends in BSDE Applications to Finance*Room 330***MS48** Aspects of High Dimensional Covariance Estimation for Equity Risk*Room 380***CP25** Risk Models for Securities and Securities Options*Room 320***CP26** Forward-Backward SDES: Theory and Applications*Room 350 440***CP27** Asymptotic Analysis*Room 370 490*

5:45 PM - 6:00 PM

Intermission

6:00 PM - 6:45 PM

**IP8** Diamond Trees, Forests, and the Exponentiation Theorem*Jim Gatheral, City University of New York, Baruch College, U.S.**Myhal Auditorium (Room 150)*

6:45 PM - 7:00 PM

Closing Remarks

*Myhal Auditorium (Room 150)***Key to abbreviations and symbols****CP** = Contributed Presentation Session**IP** = Invited Plenary Speaker**MS** = Minisymposium**MT** = Minitutorial**PD** = Panel Discussion = Coffee Break = Refreshments Served = Poster Session



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- SIAG/FM Conference Paper Prize
- SIAM Presents features FM prize lecture, invited speakers, and select minisymposia online
- Wiki

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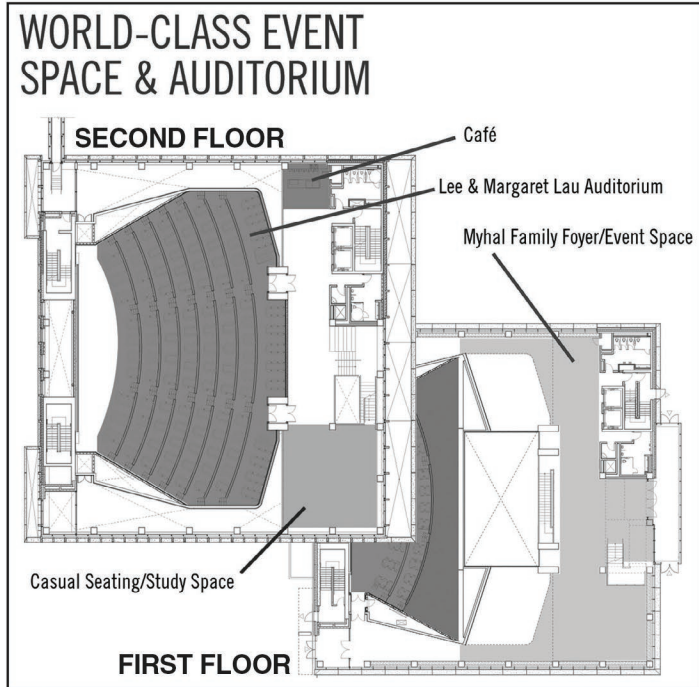
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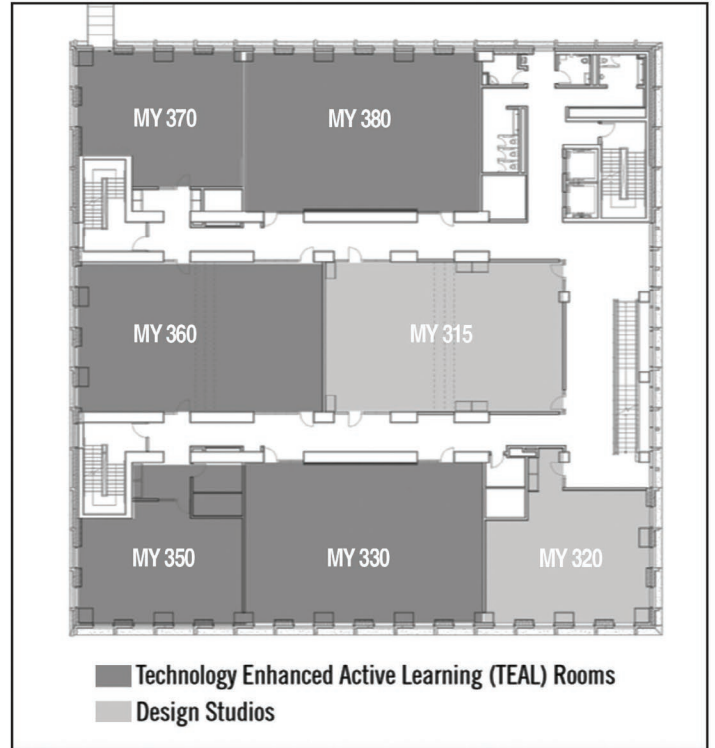
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# Maps

## University of Toronto, Myhal Centre for Engineering Innovation & Entrepreneurship



First and Second Floors



Third Floor

