At-a-Glance Schedule

SIAM Conference on
Financial Mathematics & Engineering

June 4-7, 2019
University of Toronto
Toronto, Ontario, Canada

Includes updated room assignments as of May 2019
### Tuesday, June 4

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>7:30 AM - 5:30 PM</td>
<td>Registration Myhal Atrium</td>
</tr>
<tr>
<td>8:30 AM - 10:30 AM</td>
<td>Concurrent Sessions</td>
</tr>
<tr>
<td>MT1 Machine Learning in Finance Myhal Auditorium (Room 150)</td>
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<tr>
<td>MT2 Monte Carlo Methods for Tail Risks Room 360</td>
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<tr>
<td>CP1 Stochastic Simulation and Estimation Room 315</td>
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<tr>
<td>CP2 Financial Econometricians Room 360</td>
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<tr>
<td>CP3 Portfolio Selection and Credit Contagion Room 440</td>
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<tr>
<td>10:30 AM - 11:00 AM</td>
<td>Coffee Break Myhal Atrium</td>
</tr>
<tr>
<td>11:00 AM - 11:10 AM</td>
<td>Welcome Remarks Myhal Auditorium (Room 150)</td>
</tr>
<tr>
<td>11:10 AM - 11:55 AM</td>
<td>IP1 Market Microstructure Invariance: A Dynamic Equilibrium Model</td>
</tr>
<tr>
<td>Albert S. Kyle, University of Maryland, U.S. Myhal Auditorium (Room 150)</td>
<td></td>
</tr>
<tr>
<td>11:55 AM - 1:25 PM</td>
<td>Lunch Break Attendees on their own</td>
</tr>
<tr>
<td>1:25 PM - 2:55 PM</td>
<td>Concurrent Sessions</td>
</tr>
<tr>
<td>Industrial MS1: Derivatives Valuation and Risk Management Myhal Auditorium (Room 150)</td>
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<tr>
<td>Industrial MS2: Advances in Machine Learning and Systemic Risk Room 330</td>
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</tr>
<tr>
<td>2:55 PM - 3:25 PM</td>
<td>Coffee Break Myhal Atrium</td>
</tr>
<tr>
<td>3:25 PM - 4:25 PM</td>
<td>PD1 Panel on Systemic Risk and Financial Stability Myhal Auditorium (Room 150)</td>
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<tr>
<td>4:25 PM - 4:40 PM</td>
<td>Intermission</td>
</tr>
<tr>
<td>4:40 PM - 5:40 PM</td>
<td>PD2 Panel on Fin Tech and AI Myhal Auditorium (Room 150)</td>
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<tr>
<td>5:40 PM - 6:25 PM</td>
<td>IP2 Latency in Electronic Markets</td>
</tr>
<tr>
<td>Alvaro Cartea, University of Oxford, United Kingdom Myhal Auditorium (Room 150)</td>
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</tr>
<tr>
<td>6:25 PM - 6:40 PM</td>
<td>Intermission</td>
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<tr>
<td>6:40 PM - 8:40 PM</td>
<td>PP1 Networking/Welcome Reception and Poster Session Fields Atrium</td>
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</tbody>
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### Wednesday, June 5

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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</thead>
<tbody>
<tr>
<td>12:00 PM - 1:30 PM</td>
<td>Lunch Break Attendees on their own</td>
</tr>
<tr>
<td>1:30 PM - 3:30 PM</td>
<td>Concurrent Sessions</td>
</tr>
<tr>
<td>MS7 Machine Learning - Part II of III Myhal Auditorium (Room 150)</td>
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</tr>
<tr>
<td>MS8 Robust Finance and Optimal Transport - Part II of II Room 490</td>
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<tr>
<td>MS9 Mean Field Models in Mathematical Finance - Part II of III Room 315</td>
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<tr>
<td>MS10 Systemic Risk: Stochastic Games, Policies, and Economic Incentives - Part II of II Room 330</td>
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<tr>
<td>MS11 Quantitative Methods in Insurance Market Modelling - Part II of II Room 490</td>
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<tr>
<td>MS12 Dynamic Equilibrium Models Room 320</td>
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<tr>
<td>CP6 Cyber Risk, News, and Rough Paths Room 440</td>
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</tr>
<tr>
<td>CP7 Optimal Control with Applications to Investing and Taxation Room 2159 (Bahen Centre)</td>
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</tr>
<tr>
<td>3:30 PM - 4:00 PM</td>
<td>Coffee Break Myhal Atrium</td>
</tr>
<tr>
<td>4:00 PM - 5:40 PM</td>
<td>PD1 Panel on Systemic Risk and Financial Stability Myhal Auditorium (Room 150)</td>
</tr>
<tr>
<td>5:40 PM - 6:25 PM</td>
<td>IP3 Reservoir Computing, Rough Paths and Learning of Stochastic Dynamics in Finance Josef Teichmann, ETH Zürich, Switzerland Myhal Auditorium (Room 150)</td>
</tr>
</tbody>
</table>
**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)

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**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 1180 (Bahen Centre)

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

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**Friday, June 7**

7:00 PM - 8:00 PM
SIAG/FME Business Meeting
Myhal Auditorium (Room 150)
Complimentary refreshments will be served.

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**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 1180 (Bahen Centre)

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

CP10 Computational Finance
Room 320

CP11 Rough Volatility
Room 440

CP12 Systemic Risk
Room 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)

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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 1180 (Bahen Centre)

MS33 Portfolio Selection Driven by Behavioral Finance Studies
Room 430

CP13 Portfolio Optimization
Room 320

CP14 Mean-Field Games
Room 440

CP15 Machine Learning in Finance I
Room 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
# Friday, June 7

## 1:15 PM - 3:15 PM

**Concurrent Sessions**

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

## 3:15 PM - 3:45 PM

Coffee Break

Myhal Atrium

## 3:45 PM - 5:45 PM

**Concurrent Sessions**

<table>
<thead>
<tr>
<th>Session Code</th>
<th>Title</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>MS44</td>
<td>Numerical Methods and Machine Learning for Finance - Part III of III</td>
<td>Myhal Auditorium (Room 150)</td>
</tr>
<tr>
<td>MS45</td>
<td>High-Frequency Driven Methods: Econometrics, Liquidity, Algorithmic Trading - Part III of III</td>
<td>Room 360</td>
</tr>
<tr>
<td>MS46</td>
<td>Central Counterparties (CCPs) - Part III of III</td>
<td>Room 315</td>
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<tr>
<td>MS47</td>
<td>New Trends in BSDE Applications to Finance</td>
<td>Room 330</td>
</tr>
<tr>
<td>MS48</td>
<td>Aspects of High Dimensional Covariance Estimation for Equity Risk</td>
<td>Room 380</td>
</tr>
<tr>
<td>CP25</td>
<td>Risk Models for Securities and Securities Options</td>
<td>Room 320</td>
</tr>
<tr>
<td>CP26</td>
<td>Forward-Backward SDES: Theory and Applications</td>
<td>Room 350 440</td>
</tr>
<tr>
<td>CP27</td>
<td>Asymptotic Analysis</td>
<td>Room 370 490</td>
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</tbody>
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## 5:45 PM - 6:00 PM

Intermission

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**Key to abbreviations and symbols**

- **CP** = Contributed Presentation Session
- **IP** = Invited Plenary Speaker
- **MS** = Minisymposium
- **MT** = Minitutorial
- **PD** = Panel Discussion
- **☕** = Coffee Break
- **💧** = Refreshments Served
- ** póster** = Poster Session
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- Leverage accelerators such as GPUs and Google TPUs
- Petascale Performance on Top500 supercomputers

<table>
<thead>
<tr>
<th>2000+ best-in-class packages</th>
<th>Linear Algebra</th>
<th>Standard Library</th>
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<tbody>
<tr>
<td>Interoperability:</td>
<td>Differential Equations</td>
<td>DifferentialEquations.jl</td>
</tr>
<tr>
<td>C, C++, Fortran, Python, R,</td>
<td>Machine Learning</td>
<td>Flux.jl</td>
</tr>
<tr>
<td>Java, MPI.</td>
<td>Operations Research</td>
<td>JuMP.jl</td>
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<td></td>
<td>Image Processing</td>
<td>Images.jl</td>
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<tr>
<td></td>
<td>Data Manipulation</td>
<td>JuliaDB.jl &amp; DataFrames.jl</td>
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<tr>
<td></td>
<td>Visualization</td>
<td>Plots.jl</td>
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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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- Additional discount on registration at the SIAM Conference on Financial Mathematics and Engineering (excludes student)
- Electronic communications about recent developments in your specialty
- Eligibility for candidacy for SIAG/FM office
- Participation in the selection of SIAG/FM officers

ELIGIBILITY
- Be a current SIAM member.

COST
- $15 per year
- Student members can join two activity groups for free!

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Vice Chair: Tim Leung, University of Washington
Program Director: Agostino Capponi, Columbia University
Secretary: Francesca Biagini, University of Munich

SIAG/FM: www.siam.org/Activity-Groups/FM
SIAM: www.siam.org/joinsiam
University of Toronto, Myhal Centre for Engineering Innovation & Entrepreneurship

First and Second Floors

WORLD-CLASS EVENT SPACE & AUDITORIUM

SECOND FLOOR

Café
Lee & Margaret Lau Auditorium
Myhal Family Foyer/Event Space
Casual Seating/Study Space

FIRST FLOOR

Third Floor

Technology Enhanced Active Learning (TEAL) Rooms
Design Studios

Campus Map

BA Conference Sessions, Bahren Centre (updated May 2019)

Networking/Welcome Reception, Fields Atrium

MY Conference Sessions, Myhal Centre