

Day 1 – July 3, 2019

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08:00-09:00 Registration

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09:00-10:15 Welcome & Keynote #1 (Sidney Resnick) – Rooms P1 and P2

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10:15-10:45 Morning Tea

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	Stochastic Optimization	Stochastic Networks	Queues	Stochastic Systems
	Rooms P1 and P2	Room P3	Room P4	Room P5
10:45-12:15	Stochastic Simulation Optimization <i>Eunhye Song</i> Eunhye Song Raghu Pasupathy Ben Feng Barry Nelson	Stochastic Networks and Scaling Limits <i>Amarjit Budhiraja</i> Rami Atar Sayan Banerjee Amber Puha Ruth Williams	Job Scheduling and Load Balancing in Queueing Systems <i>Onno Boxma & Jan-Pieter Dorsman</i> Ellen Cardinaels Gal Mendelson Youri Raaijmakers Jan-Pieter Dorsman	Stochastic Systems <i>Mark Squillante & David D. Yao</i> Peter Taylor Pooja Agarwal David D. Yao Eugene Feinberg

	Learning	Rare Events and Simulation	Control	Applications
	Room M1	Room M2	Rooms M5 and M6	Rooms M7 and M8
10:45-12:15	Statistical Methods for Learning and Decision Making <i>Nan Ye</i> Shuwen Hu Yang Liu Ryan Wu Aaron Snoswell	Rare Events and Distributionally Robust Optimization <i>Chang-Han Rhee</i> Jose Blanchet Zhiyuan Huang Zhe Su Chang-Han Rhee	Control and Simulation of Stochastic Systems <i>Jiheng Zhang</i> Xinyun Chen Junfei Huang Jiheng Zhang Peter Frazier	Stochastic Operations Research for Power Grids Applications <i>Alessandro Zocca</i> Tongxin Li Randall Martyr Andrés Ferragut Alessandro Zocca

12:15-13:15 Lunch

12:15-13:15 Lunch

	Model Uncertainty and Simulation Optimization	Queueing Networks and Markov Chains	Strategic Behavior in Queues	Asymptotic Analysis in Stochastic Systems
13:15-14:45	<i>Enlu Zhou</i> Eunhye Song Huajie Qian Siyang Gao Enlu Zhou	<i>Jim Dai</i> Chang Cao Michael Choi Masakiyo Miyazawa	<i>Moshe Haviv</i> Kang Kang Binyamin Oz Jieshen Wang Moshe Haviv	<i>Guodong Pang</i> Konstantin Borokov Yunan Liu Wei You Eyal Castiel

	Learning and Bandits	Approximating Rare Event Probabilities	Asymptotics and Control	Revenue, Service, and Inventory Management
13:15-14:45	<i>Sandeep Juneja</i> Dan Russo Christina Lee Yu Rajesh Sundaresan Sandeep Juneja	<i>Offer Kella</i> Adam Hamilton Zdravko Botev Krzysztof Bisewski Offer Kella	<i>Asaf Cohen</i> Ayalvadi Ganesh Henry Lam David Lipshutz Asaf Cohen	<i>Qiong Wang & Marty Reiman</i> Zhenyu Hu Junfei Huang He Wang

14:45-15:15 Afternoon Tea

14:45-15:15 Afternoon Tea

15:15-16:15 Keynote #2 (Nelly Litvak) – Rooms P1 and P2

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16:15-16:30 Mini Break

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	Efficiency in Stochastic Optimization and Simulation Experiments	Dynamic Investment and Stochastic Networks	Level-Dependent QBD Processes	Markov Chains
16:30-18:00	<i>Henry Lam</i> Karthikey Murthy Chang-Han Rhee Harsha Honnappa Huajie Qian	<i>Agostino Capponi</i> Jiahui Ji Xu Sun Peng Chu Chen Guido Lagos	<i>Yonit Barron</i> James Cordeiro Barbara Margolius Yan Chen Yonit Barron	<i>Ivo Adan</i> Stella Kapodistria Alex Wickehäm Sarah Dendiev Ivo Adan

	Statistical and Computational Aspects of Modern Machine Learning Problems	MCMC Algorithms	Control of Stochastic Systems	Applied Probability in Financial Engineering
16:30-18:00	<i>Fred Roosta-Khorasani</i> Rixon Crane Liam Hodgkinson Russell Tsuchida Ali Eshragh	<i>Michael Choi</i> Khair Xiang Au Andrew Black Michael Choi Tan Hong Ming	<i>Hayriye Ayhan</i> Daniel F. Silva Kristen Gardner Natarajan Gautam Collin Drent	<i>Lingfei Li</i> Xinyun Chen Xuefeng Gao Gongqiu Zhang Lingfei Li

18:30-20:00 Celebrating Women in APS

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Day 2 – July 4, 2019

Stochastic Optimization		Stochastic Networks	Queues	Stochastic Systems
Rooms P1 and P2		Room P3	Room P4	Room P5
09:00-10:30	Tutorial #1 <i>Rhonda Righter & Kristy Gardner</i>	Asymptotic Behavior of Stochastic Systems <i>Peter Braunsteins</i> Ross McVinish Qingwei Liu Madelon de Kemp Peter Braunsteins	Many-Server Queues <i>David Stanford</i> Niffe Hermansson Lucas van Kreveld Hiroshi Toyozumi David Stanford	Recent Advances in Stochastic Systems I <i>Jing Dong</i> Alessandro Arlotto Jim Dai Siva Maguluri Gal Mendelson
10:30-11:00 Morning Tea				

Keynote #3 (Ton Dieker) – Rooms P1 and P2

Lunch				
13:00-14:30	Simulation, Risk, and Optimization <i>Raghu Pasupathy</i> Shane Henderson Anand Deo Raghu Pasupathy Jose Blanchet	Stochastic Network Asymptotics <i>Rami Atar</i> Amarjit Budhiraja David Lipshutz Kavita Ramanan Xinchang Xie	Queueing, Control, and Services <i>Amy Ward</i> Itai Gurvich Harsha Honnappa Wei You Pengyi Shi	Recent Advances in Stochastic Systems II <i>Alessandro Arlotto</i> Jiaming Xu Jing Dong Kuang Xu Peng Sun

14:30-15:00

Afternoon Tea

15:00-16:30	Open Problem Session <i>Rami Atar & Harsha Honnappa</i>	Large Scale Interacting Queueing Networks <i>Ayalvadi Ganesh</i> Abishek Sankararaman Seva Shneer Ilze Ziedins Ayalvadi Ganesh	Stochastic Models and Matching Queues <i>Pascal Moyai</i> Amy Ward Jan-Pieter Dorsman Gideon Weiss Pascal Moyai	Approximations of Stochastic Processes <i>Giang Nguyen & Oscar Peralta</i> Marijn Jansen Michel Mandjes Giang Nguyen Oscar Peralta
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18:00-21:00

Conference Dinner

Day 2 – July 4, 2019

Learning	Diffusions and Simulation	Control	Applications
Room M1	Room M2	Rooms M5 and M6	Rooms M7 and M8
New Developments in Reinforcement Learning <i>Mengzhou Liu</i> Seungki Min Haoran Wang Nan Chen Chen Chen	Diffusions and Related Stochastic Processes <i>Jiyeon Lee</i> Rahul Jain Cristina Costantini Stewart Ethier Jiyeon Lee	Optimal Stopping and Control <i>David Goldberg</i> Dan Russo Yilun Chen David Goldberg Maxime Grangereau	Healthcare I <i>Zeynep Akşin Karaesmen</i> Galit Yom-Tov Jinsheng Chen Lerzan Ormeci Sarah James
10:30-11:00 Morning Tea			

Keynote #3 (Ton Dieker) – Rooms P1 and P2

Lunch			
13:00-14:30	Probabilistic Methods for Inference and Learning <i>Mohsen Bayati</i> Joel Goh Yoni Gur Dan Russo Mohsen Bayati	Doubly Stochastic and State Dependent Queueing Models <i>Andrew Daw</i> Xuefeng Gao Xu Sun Pamela Badian-Pessot Andrew Daw	Stochastic Optimal Control in Finance <i>Duy-Minh Dang</i> Pieter Van Staden Yaowen Lu Hanwen Zhang Duy-Minh Dang
		Healthcare II <i>Ad Ridder</i> Dennis Liu Mark Fackrell Nico van Dijk Ad Ridder	

14:30-15:00

Afternoon Tea

15:00-16:30	Learning in Sequential Decision Problems <i>Dan Russo</i> Mohsen Bayati Kuang Xu Devavrat Shah Jussi Keppo	Diffusions and Simulation <i>Viad Margarint</i> Cella Garcia-Pareja Alex Shkolnik Viad Margarint	Monte Carlo Methods <i>Pierre L'Ecuyer</i> Ezra Akin Florian Bourgey Pierre L'Ecuyer	Applications in Economics <i>Nick Arnosti</i> Minglong Zhou Behrooz Niknami Ellen Muir Nick Arnosti
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18:00-21:00

Conference Dinner

09:00-10:00 **Keynote #4 (Charles Bordenave) – Rooms P1 and P2**09:00-10:00 **Keynote #4 (Charles Bordenave) – Rooms P1 and P2**10:00-10:30 **Morning Tea**10:00-10:30 **Morning Tea**

Stochastic Optimization	Resource Allocation and Graphs	Queues	Stochastic Processes
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Learning	Statistics	Service Systems and Markov Chains	Applications
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Rooms P1 and P2	Room P3	Room P4	Room P5
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Room M1	Room M2	Rooms M5 and M6	Rooms M7 and M8
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10:30-12:00	Tutorial #2	Resource Allocation for Emerging Applications	Approximations and Controls for Queues	Branching Random Walks
	<i>Devavrat Shah</i>	<i>Siva Theja Maguluri</i>	<i>Yunan Liu</i>	<i>Sophie Hautphenne & Peter Brauneis</i>
		Daniela Hurtado-Lange Pengyu Qian Martin Zubeldia Raga Gopalakrishnan	Amy Ward Xin Liu Yunan Liu Xu Sun	Fabio Zucca Daniela Bertacchi Sophie Hautphenne Peter Brauneis

10:30-12:00	Information and Learning in Stochastic Systems	Statistics and Stochastic Processes	Matching and Compensation	Ecology/ Block Chain
	<i>Yuan Zhong</i>	<i>Sarat Moka</i>	<i>Jussi Keppo</i>	<i>Rhys Bowden</i>
	Kuang Xu Alessandro Arlotto Dan Russo Vijay Kamble	Lijing Ma Angus Lewis Laleh Tafakori Sarat Moka	Simon Loertscher Satyanath Bhat Andrew Lim Irene Lo	David Warne Cody Nitschke Max Wurm Rhys Bowden

12:00-13:00 **Lunch**12:00-13:00 **Lunch**

13:00-14:30	Simulation Optimization	Resource Allocation Models	Statistical Inference in Queueing Systems	Recent Developments and Advances in Markov Decision Processes
	<i>Shane Henderson</i>	<i>Aleksandr Stolyar</i>	<i>Liron Ravner</i>	<i>Sandjai Bhulai & Floske Spieksma</i>
	Dan Russo Enlu Zhou L. Jeff Hong Shane Henderson	Seva Shneer Yuan Zhong Kuang Xu Alexander Stolyar	Azam Asanjarani Liron Ravner Michel Mandjes	Odysseas Kanavetas Sandjai Bhulai Qi-Ming He Floske Spieksma

13:00-14:30	Learning, Optimization and Applied Probability	Large-Scale Inference and High-Dimensional Statistics	Storage Processes and Markov Chains	Stochastic Modeling and Control in Healthcare and Service Operations
	<i>Harsha Honnappa</i>	<i>Wen Sun</i>	<i>Jaron Sanders</i>	<i>Pengyi Shi</i>
	Sandeep Juneja Siva Theja Maguluri Zeyu Zheng Raghu Pasupathy	Peter Radchenko Yunjin Choi Yin Xia Robert Cope	Royi Jacobovic Eleonora Delana Ankan Ganguly Jaron Sanders	Xiaoshan Peng Yunan Liu Jing Dong Pengyi Shi

14:30-15:00 **Afternoon Tea**14:30-15:00 **Afternoon Tea**

15:00-16:30	Convex Optimization in Applied Probability	Asymptotics and Algorithms on Random Graphs	Queueing and Scheduling	Jump Markov Processes
	<i>Chaithanya Bandi</i>	<i>Mariana Olvera-Cravioto</i>	<i>John Hasenbein</i>	<i>Eugene Feinberg</i>
	Pengyu Qian Siva Theja Maguluri Gar Goei Loke Alexej Proskynitopoulos	Junyu Cao Nicolas Fraiman Sayan Banerjee Mariana Olvera-Cravioto	Ivo Adan Rhonda Righter John Hasenbein Gideon Weiss	Michael Katehakis Floske Spieksma Eugene Feinberg

15:00-16:30	Learning in Service Systems	Random Walks/ Dynamic Markets	Analysis of Computing and Service Systems	Stochastic Modeling for Service Systems
	<i>Stella Kapodistria</i>	<i>Ruiling Zuo</i>	<i>Sherwin Doroudi</i>	<i>Nilay Tanik Argon & Lerzan Ormeç</i>
	Yannik Peeters Zahra Saberi Stella Kapodistria	Vyacheslav Abramov Masahiro Kobayashi Ellen Muir Ruiling Zuo	Jazeem Abdul Jaleel Kayla Javier Kristen Gardner Sherwin Doroudi	Rik W. Timmerman Huiyin Ouyang Zhankun Sun Lerzan Ormeç

16:30-17:00 **Cake and Farewell**16:30-17:00 **Cake and Farewell**