Friday June 22

8:00 – 9:00	Breakfast and Coffee (Park Atrium)		
9:00 – 12:30	**Workshop:** Frontiers of Market Design Organizers: *Alex Teytelboym and Mohammad Akbarpour*	**Workshop** on Opinion Aggregation, Dynamics, and Elicitation Organizers: *Yiling Chen, Vincent Conitzer, Ashish Goel, Kamesh Munagala*	2nd **Workshop** on Mechanism Design for Social Good Organizers: *Rediet Abebe and Kira Goldner*
12:30 – 2:00	Lunch (Carrier Ballroom)		
2:00 – 5:30	**Workshop:** Frontiers of Market Design (continued)	**Workshop** on Opinion Aggregation, Dynamics, and Elicitation (continued)	2nd **Workshop** on Mechanism Design for Social Good (continued)
LOCATION >	Room #265	Room #396	Room #196

Sponsors

EC'18 proceedings available online at http://www.sigecom.org/ec18/toc.html or by scanning the following QR code:

Add the schedule to your Google Calendar at: https://goo.gl/RbqpLx or by scanning the following QR code:

ec18
CORNELL

The 19th ACM Conference on
Economics and Computation

TECHNICAL PROGRAM

Monday June 18

Time				
7:30 – 8:30	Breakfast and Coffee (Park Atrium)			
8:30 – 12:30	**Mentoring Workshop:** This is aimed to provide early-stage researchers the background, both from a technical and mentoring perspective, to start a successful research career in Algorithmic Game Theory. Organizers: *Nicole Immorlica, Ruta Mehta, and Matt Weinberg*	**Tutorial:** Emerging Research Directions Regarding Incentives and Cryptocurrencies Organizers: *Jacob Leshno, Arvind Narayanan, Georgios Piliouras, Alex Psomas, Matt Weinberg*	**Tutorial:** The Menu-Size of Precise and Approximate Revenue Maximizing Auctions Organizers: *Kira Goldner, Yannai Gonczarowski*	**Tutorial:** Information, Persuasion, and Decision making Organizers: *Bo Waggener, Haifeng Xu*
12:30 – 2:00		Lunch (Carrier Ballroom)		
2:00 – 5:30		**Tutorial:** Algorithmic fairness Organizers: *Sam Corbett-Davies, Rachel Cummings, Sharad Goel, Jamie Morgenstern*	**Tutorial:** Gross substitutes: Combinatorial structure and algorithms Organizers: *Renato Paes Leme and Inbal Talgam-Cohen*	**Tutorial:** Industrial Organization Organizer: *Greg Lewis*
LOCATION >	Room #196	Room #265	Room #396	Room #198
6:00 – 8:00	Reception and Poster Session (Gates Hall)			

Tuesday June 19

Time		
8:15 – 9:00	Breakfast (Park Atrium)	
9:00 – 9:15	Opening (Statler Auditorium)	
9:15 – 10:15	Invited Talk (Statler Auditorium) **Algorithmic Fairness and the Social Welfare Function** *Sendhil Mullainathan (Harvard University)* Chair: *Jon Kleinberg*	
10:15 – 10:45	Coffee Break (Park Atrium)	
	1A: Information Acquisition I (Statler Auditorium) Chair: *Sven Seuken*	**1B: Sharing Economy** (Room #196) Chair: *Augustin Chaintreau*
10:45 – 11:45		
10:45	Strategyproof linear regression in high dimensions *Yiling Chen, Chara Podimata, Ariel Procaccia and Nisarg Shah*	Surge Pricing Moves Uber's Driver-Partners *Alice Lu, Peter Frazier and Oren Kislev*
11:05	Optimal data acquisition for statistical estimation *Yiling Chen, Nicole Immorlica, Brendan Lucier, Vasilis Syrgkanis and Juba Ziani*	The sharing economy and housing affordability: Evidence from Airbnb *Barron, Edward Kung and Davide Proserpio*
11:25	Optimal and Myopic Information Acquisition *Annie Liang, Xiaosheng Mu and Vasilis Syrgkanis*	Advertising strategy in the presence of reviews: an empirical analysis *Brett Hollenbeck, Sridhar Moorthy and Davide Proserpio*
11:45 – 11:55	10-minute Break	
	2A: Information Acquisition II (Statler Auditorium) Chair: *Vincent Conitzer*	**2B: Social Choice and Pricing** (Room #196) Chair: *Ozan Candogan*
11:55 – 12:55		
11:55	Learnability and models of decision making under uncertainty *Pathikrit Basu and Federico Echenique*	Consistent approval-based multi-winner rules *Martin Lackner and Piotr Skowron*
12:15	Strategic classification from revealed preferences *Jinshuo Dong, Aaron Roth, Zachary Schutzman, Bo Waggoner and Zhiwei Steven Wu*	Social choice with non-quasi linear utilities *Hongyao Ma, Reshef Meir and David C. Parkes*
12:35	Overabundant information and learning traps *Annie Liang and Xiaosheng Mu*	Optimal pricing and Introduction timing of new virtual machines *Ian Kash, Peter Key and Spyros Zoumpoulis*
12:55 – 2:25	Lunch (Carrier Ballroom)	

Time		
	3A: Combinatorial Auctions (Statler Auditorium) Chair: *Yang Cai*	**3B: Equilibria Computation** (Room #196) Chair: *Ruta Mehta*
2:25 – 3:45		
2:25	Combinatorial auctions with endowment effect *Moshe Babaioff, Shahar Dobzinski and Sigal Oren*	Computational complexity of proper equilibrium *Kristoffer Arnsfelt Hansen and Troels Bjerre Lund*
2:45	The Combinatorial clock auction: the effects of strategic behaviour and the price increment rule on social welfare *Max Dupre La Tour and Adrian Vetta*	Computing a subgame perfect equilibrium of a sequential matching game *Yasushi Kawase, Yutaro Yamaguchi and Yu Yokoi*
3:05	Designing core-selecting payment rules: A computational search approach *Benjamin Lubin, Benedikt Bunz and Sven Seuken*	The Big Match with a clock and a bit of memory *Kristoffer Arnsfelt Hansen, Rasmus Ibsen-Jensen and Abraham Neyman*
3:25	Fast core pricing for rich advertising auctions *Jason Hartline, Nicole Immorlica, Mohammad Reza Khani, Brendan Lucier and Rad Niazadeh*	Incremental strategy generation for Stackelberg equilibria in extensive-form Games *Jakub Cerny, Branislav Bosansky and Christopher Kiekintveld*
3:45 – 4:15	Coffee Break (Park Atrium)	
	4A: Mechanism Design I (Statler Auditorium) Chair: *Nima Haghpanah*	**4B: Information Acquisition and Rationality** (Room #196) Chair: *Georgios Piliouras*
4:15 – 5:35		
4:15	Non-clairvoyant dynamic mechanism design *Vahab Mirrokni, Renato Paes Leme, Pingzhong Tang and Song Zuo*	Water from two rocks: maximizing the mutual information *Yuqing Kong and Grant Schoenebeck*
4:35	Robust repeated auctions under heterogeneous buyer behavior *Shipra Agrawal, Constantinos Daskalakis, Vahab Mirrokni and Balasubramanian Sivan*	Eliciting expertise without verification *Yuqing Kong and Grant Schoenebeck*
4:55	A general theory of sample complexity for multi-item profit maximization *Maria-Florina Balcan, Tuomas Sandholm and Ellen Vitercik*	The one-shot crowdfunding game *Itai Arieli, Moran Koren and Rann Smorodinsky*
5:15	Are two (samples) really better than one? On the non-asymptotic performance of empirical revenue maximization *Moshe Babaioff, Yannai A. Gonczarowski, Yishay Mansour and Shay Moran*	Dancing pigs or externalities? Measuring the rationality of security decisions *Elissa M. Redmiles, Michelle L. Mazurek and John P. Dickerson*
6:00 – 7:00	Invited Talk (Statler Auditorium) **Mechanism design challenges in cryptocurrency and blockchains** *Vitalik Buterin (Ethereum Foundation)* Chair: *Glen Weyl*	

Wednesday June 20

Time		
8:00 – 9:00	Women in EC Breakfast Hosts: *Jamie Morgenstern* and *Rachel Cummings* (Carrier ballroom)	Breakfast (Park Atrium) Starts at **8:15**
9:00 – 10:00	Invited Talk (Location: Statler Auditorium) **High-Frequency Trading and the Design of Financial Exchanges: Will the Market Fix the Market?** *Eric Budish (University of Chicago Booth School of Business)* Chair: *Edith Elkind*	
10:00 – 10:30	Coffee Break (Park Atrium)	
	5A: Prophet Inequalities (Statler Auditorium) Chair: *Brendan Lucier*	**5B: Matching** (Room #196) Chair: *Nisarg Shah*
10:30 – 11:30		
10:30	Delegated search approximates efficient search *Jon Kleinberg and Robert Kleinberg*	Almost optimal stochastic weighted matching with few queries *Soheil Behnezhad and Nima Reyhani*
10:50	Prophet secretary: surpassing the 1-1/e barrier *Yossi Azar, Ashish Chiplunkar and Haim Kaplan*	First-choice maximal and first-choice stable school choice mechanisms *Umut Dur, Timo Mennle and Sven Seuken*
11:10	Prophets and secretaries with overbooking *Tomer Ezra, Michal Feldman and Ilan Nehama*	Stable marriage with multi-modal preferences *Jiehua Chen, Rolf Niedermeier and Piotr Skowron*
11:30 – 11:40	10-minute Break	
11:40 – 12:30	Test of Time Award (Statler Auditorium) **First Analyses of the Generalized Second Price Auction (GSP) for Sponsored Search** *Hal R. Varian, Benjamin Edelman, Michael Ostrovsky, Michael Schwarz, Gagan Aggarwal, Ashish Goel, and the late Rajeev Motwani* Chair: *Tuomas Sandholm*	
12:30 – 2:00	Lunch (Carrier Ballroom)	
2:00 – 3:30	Business meeting (Statler Auditorium)	
	6A: Mechanism Design II (Statler Auditorium) Chair: *Mohammad Mahdian*	**6B: Equilibrium Dynamics** (Room #196) Chair: *Aviad Rubinstein*
3:30 – 4:30		
3:30	Interdependent values without single-crossing *Alon Eden, Michal Feldman, Amos Fiat and Kira Goldner*	Multiplicative weights update in zero-sum games *James Bailey and Georgios Piliouras*
3:50	Credible mechanisms *Mohammad Akbarpour and Shengwu Li*	Cycles in zero sum differential games and biological diversity *Tung Mai, Milena Mihail, Ioannis Panageas, Vijay Vazirani, Will Ratcliff and Peter Yunker*
4:10	The best of both worlds: asymptotically efficient mechanisms with a guarantee on the expected gains-from-trade *Moshe Babaioff, Yang Cai, Yannai A. Gonczarowski and Mingfei Zhao*	Dynamics of distributed updating in Fisher markets *Yun Kuen Cheung, Richard Cole and Yixin Tao*
4:30 – 5:00	Coffee Break (Park Atrium)	
	7A: Mechanism Design III (Statler Auditorium) Chair: *Adrian Vetta*	**7B: Equilibrium Analysis** (Room #196) Chair: *Nicolas Stier*
5:00 – 6:00		
5:00	Optimal deterministic mechanisms for an additive buyer *Moshe Babaioff, Noam Nisan and Aviad Rubinstein*	Network pricing: how to induce optimal flows under strategic link operators *Jose Correa, Cristobal Guzman, Thanasis Lianeas, Evdokia Nikolova and Marc Schroder*
5:20	Revenue loss in shrinking markets *Shahar Dobzinski and Nitzan Uziely*	Polynomial time equilibria in bottleneck congestion games *Costas Busch and Rajgopal Kannan*
5:40	99% Revenue via Enhanced Competition *Michal Feldman, Ophir Friedler and Aviad Rubinstein*	Spatio-temporal security games beyond one dimension *Soheil Behnezhad, Mahsa Derakhshan, Mohammadtaghi Hajiaghayi and Saeed Seddighin*
6:30	Conference Dinner (Duffield Atrium)	

Thursday June 21

Time		
8:15 – 9:00	Breakfast (Park Atrium)	
9:00 – 10:10	AGT Fest: Invited talks from conferences (Location: Statler Auditorium) Chair: *Nicole Immorlica*	
9:00	Safe and Nested Subgame Solving for Imperfect-Information Games , NIPS'17 *Noam Brown and Tuomas Sandholm*	
9:20	First-Price Auctions with General Information Structures: Implications for Bidding and Revenue, Econometrica *Dirk Bergemann, Ben Brooks and Stephen E. Morris*	
9:40	Welfare Guarantees from Data , NIPS'17 *Darrell Hoy, Denis Nekipelov, and Vasilis Syrgkanis*	
10:00 – 10:30	Coffee Break (Park Atrium)	
	8A: Mechanism Design IV (Statler Auditorium) Chair: *Alex Slivkins*	**8B: Market Experiments** (Room #196) Chair: *Kevin Leyton-Brown*
10:30 – 11:50		
10:30	The price of prior dependence in auctions *Pingzhong Tang and Yulong Zeng*	A/B testing *Eduardo Azevedo, Alex Deng, Jose Montiel Olea, Justin Rao and E. Glen Weyl*
10:50	Prior-independent optimal auctions *Omar Besbes and Amine Allouah*	A personalized BDM mechanism for efficient market intervention experiments *Imanol Arieta Ibarra and Johan Ugander*
11:10	Learning to bid without knowing your value *Zhe Feng, Chara Podimata and Vasilis Syrgkanis*	The costs of entering through tying: experimental evidence *Hyunjin Kim and Michael Luca*
11:30	Selling to a no-regret buyer *Mark Braverman, Jieming Mao, Jon Schneider and S. Matthew Weinberg*	Reputation in the long-run *Apostolos Filippas, John Joseph Horton and Joseph Golden*
11:50 – 12:00	10-minute Break	
12:00 – 12:40	Dissertation Award (Location: Statler Auditorium) **Hardness of Approximation Between P and NP** *Aviad Rubinstein* Chair: *Nicole Immorlica*	
12:40 – 2:10	Lunch (Carrier Ballroom)	
	9A: Fair Allocation (Statler Auditorium) Chair: *Omer Tamuz*	**9B: Markets and Networks** (Room #196) Chair: *Grant Schoenebeck*
2:10 – 3:30		
2:10	Fair allocation of indivisible goods: improvements and Generalizations *Masood Seddighin, Mohammad Ghodsi, Mohammadtaghi Hajiaghayi, Saeed Seddighin and Hadi Yami*	Redistribution through markets *Piotr Dworczak, Scott Duke Kominers and Mohammad Akbarpour*
2:30	Finding fair and efficient allocations *Siddharth Barman, Sanath Kumar Krishnamurthy and Rohit Vaish*	Optimal commissions and subscriptions in networked markets *John Birge, Ozan Candogan, Hongfan Chen and Daniela Saban*
2:50	Fair allocation of indivisible public goods *Brandon Fain, Kamesh Munagala and Nisarg Shah*	Trading networks with frictions *Tamas Fleiner, Zsuzsanna Janko and Alexander Teytelboym*
3:10	How to make envy vanish over time *Gerdus Benade, Aleksandr Kazachkov, Ariel Procaccia and Christos-Alexandros Psomas*	Chain stability in trading networks *John Hatfield, Scott Kominers, Alexandru Nichifor, Michael Ostrovsky and Alexander Westkamp*
3:30 – 4:00	Coffee Break (Park Atrium)	
	10A: Learning and Social Networks (Statler Auditorium) Chair: *Hossein Esfandiari*	**10B: Mechanism Design V** (Room #196) Chair: *Inbal Talgam-Cohen*
4:00 – 5:20		
4:00	Naive Bayesian learning in social networks *Jerry Anunrojwong and Nat Sothanaphan*	On the construction of substitutes *Eric Balkanski and Renato Paes Leme*
4:20	Bayesian social learning in a dynamic environment *Krishna Dasaratha, Benjamin Golub and Nir Hak*	Frugal auction design for set systems: vertex cover and knapsack *Mohammad Hajiaghayi, Mohammadreza Khani and Saeed Seddighin*
4:40	Social learning equilibria *Elchanan Mossel, Manuel Mueller Frank, Allan Sly and Omer Tamuz*	Matching auctions for search and native ads *Ruggiero Cavallo, Maxim Sviridenko and Christopher Wilkens*
5:00	Diffusion, seeding, and the value of network information *Mohammad Akbarpour, Suraj Malladi and Amin Saberi*	The efficiency of resource allocation mechanisms for budget-constrained users *Ioannis Caragiannis and Alexandros Voudouris*