Monday - Minmax

8:30-9:00 Welcome and presentation of participants

9:00-10:00 Uri Zwick
Local Improvement/Policy Iteration
Algorithms

Coffee Break

10:30-11:00 Oliver Friedman Exponential lower bounds for strategy iteration

11:00-11:30 Thomas Dueholm Hansen A subexponential lower bound for the Random Facet algorithm for Parity Games

11:30-12:00 Peter Bro Miltersen Doubly-exponential complexity of solving reachability games using value iteration and strategy iteration

Lunch Break

14:00-14.30 Marcin Jurdzinski Lemke's algorithm for discounted games

14:30-15:30 Kousha Etessami Adding Recursion to Markov Chains, Markov Decision Processes, and Stochastic Games Algorithms and Complexity

Coffee and Cake

16:30-16:55 Kristoffer Arnsfelt Hansen Hardness of approximating minmax in 3-player games

16:55-17:35 Hugo Gimbert Stochastic games with signals: decidable and undecidable problems

17.35-18:00 Florian Horn Solving stochastic tail games

20:00 Open problem session 1
according to interest
- solutions and further problem
sessions will be scheduled
ad hoc throughout



### Tuesday-Markets

9.00-10:00 Mihalis Yannakakis Complexity of Nash equilibria and fixed points

Coffee Break

10:30-11:10 Vijay Vazirani Market Equilibrium: the Quest for the "Right" Model

11:10-11:35 Gagan Goel A perfect price discrimination market, its welfare theorems, and an efficient algorithm for computing its equilibria

11:35-12:05 Mike Todd An algorithmic proof of Afriat's theorem on consumer behavior and related questions

#### Lunch Break

14:00-14:30 Walter Morris
The P-matrix linear complementarity
problem: A survey of complexity
results

14:30-15:00 Jim Orlin
A faster and simpler algorithm for computing Fisher's market equilibrium

15:00-15:30 Nikhil Devanur A new convex program for Fisher markets and convergence of proportional response dynamics

## Coffee and Cake

16:00-16:45 Richard Cole Viewing Market Price Discovery as an Algorithmic Process

16:45-17:30 Xiaotie Deng Competitive Equilibrium at Advertising Marketplaces

20:00 Open problem session 2



Wednesday - Equilibria and complexity

8:30-9:00 Julian Merschen Finding Gale strings

9:00-9:30 Edith Elkind Equilibria of Plurality Voting with Abstentions

9:30-10:00 Constantinos Daskalakis A generalization of the min-max theorem to multiplayer games

Coffee Break

10:25 - 11:00 Kevin Leyton-Brown Computational Mechanism Analysis: Leveraging Equilibrium Computation to Understand Real-World Mechanisms

11:00 - 12:00 Sergiu Hart Dynamics and equilibrium

Lunch Break

13.00 Photo shoot!

13.15 Hike (roughly 8 kilometers - break with cake at lake scheduled)

21.00 Wine party...



Thursday - Refinements, selection, coalitions

9:00-9:30 Bjarke Roune
Maximum lattice free bodies

9:30-10:00 Boyu Zhang Homotopy methods for finding quantal response equilibria

#### Coffee Break

10:30-11:30 Christos Papadimitriou Computing equilibria: the plot thickens

11:30-12:00 Troels Bjerre Sørensen NP- and SQRT-SUM-hardness of verifying trembling hand perfection and other equilibrium refinements

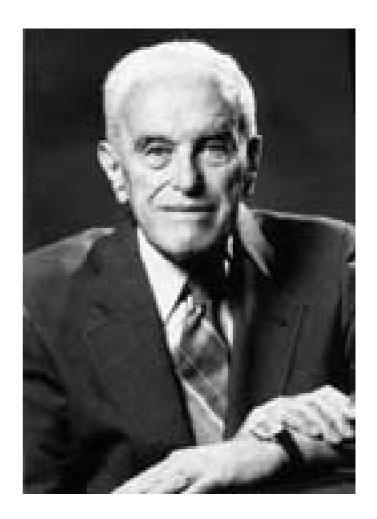
## Lunch Break

14:30-15:00 Gianluigi Greco Nucleolus Computation in Compact Coalitional Games

15:00-15:30 Martin Gairing and Rahul Savani Finding stable outcomes in hedonic games

# Coffee and Cake

16:40-17:30 Andy McLennan Coalitional Bargaining How Complex Is It?



Friday - Congestion games

9:00-9:30 Maria Polukarov Congestion-Averse Games

9:30-10:00 Alexander Skopalik Computing Pure Nash and Strong Equilibria in Bottleneck Congestion Games

Coffee Break

10:30 Solution session

