

São Paulo Advanced School of Science on Algorithms, Combinatorics and Optimization

July 2016, IME-USP

Program: First Week

	Mon 18	Tue 19	Wed 20	Thu 21	Fri 22
08:00–08:45	Registration ¹	—	—	—	—
08:45–09:00	Welcome session	—	—	—	—
09:00–10:00	Upfal	Lucchesi	Robins	Williamson	Kohayakawa
10:00–10:15	Coffee				
10:15–11:15	Kohayakawa	Upfal	Williamson	Kohayakawa	Talk 3
11:15–12:15	Lucchesi	Kleinberg	Talk 1	Robins	Talk 3
12:15–13:30	Lunch				
13:30–14:30	Kleinberg	Kohayakawa	Upfal	Upfal	Lucchesi
14:30–15:30	Williamson	Robins	Lucchesi	Talk 2	Williamson
15:30–16:30	Coffee	Coffee & Posters			
	Opening				
16:30–17:30	(16:00)	Classwork			Robins
17:30–18:30	Music	Classwork			

Courses

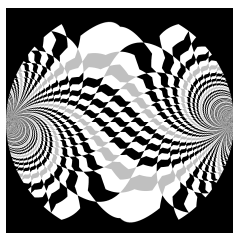
- ▷ Combinatorial stochastic search and selection, Robert **Kleinberg**
- ▷ The regularity method and blow-up lemmas for sparse graphs, Yoshiharu **Kohayakawa**
- ▷ The perfect matching polytope, solid bricks and the perfect matching lattice, Cláudio L. **Lucchesi**
- ▷ Harmonic analysis on polytopes and cones, Sinai **Robins**
- ▷ Sample complexity and uniform convergence, Eli **Upfal**
- ▷ Recent progress in approximation algorithms for the traveling salesman problem, David **Williamson**

Talks

- ▷ **Talk 1:** Adaptive rumor spreading, Marcos Kiwi

¹Registration will be open all day long.

- ▷ **Talk 2:** Determining the rank of some graph convexities, Jayme L. Szwarcfiter
- ▷ **Talk 3:** Progression-free sets, the polynomial method, and arithmetic removal lemmas, Robert **Kleinberg**



São Paulo Advanced School of Science on Algorithms, Combinatorics and Optimization

July 2016, IME-USP

Program: Second Week

	Mon 25	Tue 26	Wed 27	Thu 28	Fri 29
09:00–10:00	Kostochka	Tunçel	Král'	Tunçel	Oliveira
10:00–10:15	Coffee				
10:15–11:15	Tunçel	Král'	Morris	Král'	Kostochka
11:15–12:15	Talk 3	Miyazawa	Miyazawa	Kostochka	Talk 5
12:15–13:30	Lunch				
13:30–14:30	Král'	Kostochka	Tunçel	Oliveira	—
14:30–15:30	Morris	Morris	Talk 4	Morris	—
15:30–16:30	Coffee & Posters				—
16:30–17:30	Classwork				—
17:30–18:30	Talent Show	Classwork			—

Courses

- ▷ Coloring sparse graphs with few colors, Alexandr **Kostochka**
- ▷ Graph limits and their applications in extremal combinatorics, Daniel **Král'**
- ▷ Approximation Algorithms for Packing Circles, Flávio Keidi **Miyazawa**
- ▷ The method of hypergraph containers, Robert **Morris**
- ▷ Upper bounds for geometric packing problems,
Fernando Mário de **Oliveira** Filho
- ▷ Semidefinite Programming Techniques in Combinatorial Optimization,
Levent **Tunçel**

Talks

- ▷ **Talk 3:** Random models of 21st century networks and their connectivity structure, Bruce Reed
- ▷ **Talk 4:** On The Structure of Almost Every H -Free Graph, When H is a Tree or a Cycle, Bruce Reed
- ▷ **Talk 5:** Solving NP-hard geometric optimization problems to optimality,
Cid Carvalho de Souza