

# Optima@ISMP

Newsletter of the 20th International Symposium on Mathematical Programming

Thursday, August 27, 2009



Photo by K.B. Lavelle

## Thursday's ISMP Events

Tucker Prize Session  
**Marriott-Scottsdale, 10:30am-  
Noon. See sidebar (far right) for  
details.**

Want to see your item on this list tomorrow? Email [optima.ismp@gmail.com](mailto:optima.ismp@gmail.com) before 3pm today and we'll try to slip you in!

**Thursday**



72° F | 63° F  
Scattered Rain

**Friday**



72° F | 61° F  
Rain Likely

**Saturday**



70° F | 55° F  
Chance of Rain

## Today's Plenaries

**Lars Peter Hansen**

Valuation in Dynamic Stochastic Economies

**Marriott-Chicago DE, 9am**

**Eddie Anderson**

Supply Functions for Electricity Markets: The Priority of Optimization Over Equilibrium

**Marriott-Chicago D, 5pm**

**Jong-Shi Pang**

Some Paths in Mathematical Programming

**Marriott-Chicago E, 5pm**

## That's So Random!

*Arbitrarily featured, potentially great...*

**George Karakostas**

Selfish Routing with Oblivious Users and User Preferences (Session THA21, Telecommunications and Networks Cluster) Gleacher 304, 10:30)

**Gleacher 304, 10:30am**

*Dr. Karakostas is from the Department of Computing and Software at McMaster University, Hamilton, Ontario. His talk is about joint work with Taeyon Kim, Anastasios Viglas, and Hao Xia.*

*As announced at the opening session, Dick Cottle's article, "A Brief History of the International Symposia on Mathematical Programming," describes each of the 20 conferences (from ISMP 0 to 19) that precede this year's 20th ISMP. His article will appear in an upcoming issue of Mathematical Programming B with papers from the plenary and semi-plenary speakers. A limited number of hard-bound copies of Cottle's article also may be purchased by special order. View a copy and place your order at the registration desk through Friday.*

## Paul Tseng's Whereabouts Still Unknown

The University of Washington has issued the following press release concerning Paul Tseng:

"University of Washington mathematics professor Paul Tseng has been missing since August 13 in a scenic mountainous region in Yunnan Province, China. Tseng was invited to China to participate in the Seventh Annual International Conference on Numerical Optimization and Numerical Linear Algebra in Lijiang on August 17, hosted by the Chinese Academy of Sciences. Prior to his appearance at the conference, Tseng, an avid outdoorsman and experienced kayaker, planned a kayaking trip on the Jinsha river. When he failed to appear for his presentation, conference organizers notified the local authorities in Lijiang. Search efforts have been underway since then involving local Chinese authorities and Control Risks, a company retained by the University of Washington that specializes in overseas assistance. Tseng was seen entering the Jinsha river August 13 near Jinganqiao, but there has been no contact from him since and his whereabouts remain unknown."

Tom Luo is working with the UW team in China to locate Paul. Paul's many colleagues and friends at ISMP are distressed by his absence and he remains very much in our thoughts as we wait and hope for good news.

## Tucker Prize Session Today

**Marriott-Scottsdale, 10:30am-Noon**

There will be a special session today at which the winner and the other two finalists for ISMP's 2009 Tucker Prize will present talks about work related to their thesis. The program is as follows:  
10:30am-11am: Mohit Singh (Microsoft Research), "Iterative Methods in Combinatorial Optimization"  
11am-11:30am: Jiawang Nie (UCSD), "Convergence Speed of Lasserre's Relaxation in Multivariate Polynomial Optimization"  
11:30am-Noon: Tobias Achterberg (IBM), "Advances in MIP - New Tricks for the Bag"  
Please see the addendum to the Symposium program for full details.



## Winner's Talk

**Interview with Gérard Cornuéjols, Dantzig Prize Winner**  
*Congratulations on winning the Dantzig Prize! Please tell us a little about your education and career.*

Thanks. The prize came as a complete surprise and, of course, I am elated. I did my undergraduate studies in civil engineering in Paris, where I enjoyed issues related to network flows. For this reason, Ray Fulkerson was an attraction to study at Cornell as a PhD student. He introduced me to perfect graphs and balanced matrices. George Nemhauser introduced me to integer programming and I have worked passionately on these three topics ever since. I wrote my dissertation with George on the simple plant location problem. My first position was at Carnegie Mellon University and I am still there today.

*What have you been working on recently? Where is your research heading?*

I am working on cutting planes generated from several rows of the simplex tableau. This is an area that finds its roots in the work of Ralph Gomory, Egon Balas and Ellis Johnson in the 70s, but it was then completely abandoned. This topic was revived recently. It is at the heart of integer programming theory and it certainly deserves renewed attention. There is a connection to maximal lattice-free convex sets, which have been studied in a different context. It is a fun topic to work on, and I am currently looking at different aspects in collaboration with various colleagues.

*You have spent many years in the Tepper Business school at CMU, while the majority of your optimization colleagues are in math, science and engineering departments. How does the business school environment influence your research? What has been the*

*relationship between your research and your teaching activities?*

CMU is unique among American universities in that its PhD program in Operations Research is run by the business school. This is so for historical reasons, dating back to the foundation of the business school by Bill Cooper and his colleagues. The business school has a sizeable Operations Research group; it is expected that its faculty will be judged by the standards of the Operations Research community. The current administrators at the Tepper school of business have been very supportive of our group and, for me, the business school environment has been a source of freedom rather than constraints on my research. Similarly, I do not feel that there needs to be a strong connection between my research and my teaching. This being said, teaching MBA students keep us reminded of the need for user-friendly reliable optimization tools: There is still work left for us researchers in the mathematical programming community.



## Puzzler!

Here is an unusual safe. Each of the buttons must be pressed once only in the correct order to reach the centre X and open the safe. The number of moves and direction to move is marked on each button. Which button is the first you must press?

1 E	4 S	2 E	2 S	4 S
2 S	3 E	1 E	1 N	2 S
1 N	1 N	X	2 W	4 W
3 N	2 E	3 N	1 W	1 N
3 E	1 N	2 N	1 W	4 W

## Optimal Chicago

City attractions to visit on your down time.

### Good Eats

#### Taste Chicago - Morton's Steakhouse

1050 N. State St.

While there are now Morton's steakhouses coast to coast, this original spot, founded by Arnie Morton, is a destination for sirloin, strip or filet mignon. The below-street location adds to the air of exclusivity. Look for celebrities and politicians; steak is prime fuel for Chicago's movers and shakers.

#### Quick Bite- Portillos's Hot Dogs

100 W. Ontario St.

This Chicago chain offers what owner Dick Portillo calls "the finest in Chicago street food"—signature hot dogs, Italian beef, Polish sausage and ribs. Now owner of the successful local chain, Portillo began in 1963, operating out of a trailer in a Chicago suburb.

### Tonight in Chicago

#### Jazzin' at the Shedd - Shedd Aquarium.

Features Detour JazFunk and The Tim Fitzgerald Trio. Free with regular admission (\$12). Reachable by taxi. *Shedd Aquarium, 5pm-10pm. (Regular museum hours: 9am-6pm.)*

#### Athens Sister City Shuffle 5K & Festival - Lakefront.

This short lake-side race and fest features entertainment by Chicago's Jesse White Tumbling Team and the Olympian Greek Dance Troupe. For \$15 more, participants get a post-run authentic Greek meal with drinks. Race winners honored with olive leaf crowns in a traditional Olympic-style ceremony. Register on race-day for \$35. *Randolph at the lakefront, 5pm-registration starts, 7pm-race begins.*

#### Chicago Architecture Foundation Happy Hour Tour - 'Historic North Downtown.'

Visit some of the great architectural landmarks of State Street and Michigan Avenue from the late 19th/early 20th centuries. Free drink ends two-hour tour. \$16; reservations recommended - 312-922-3432 x226. *Meet at CAF shop, 224 South Michigan Avenue, 5:30pm.*

#### The Art Institute of Chicago—Museum: Free Evening.

To celebrate the recent opening of the new Modern Wing, enjoy free admission to the Art Institute on Thursday and Friday evenings. Free modern wing highlights tour, 5:30pm; museum highlights tour, 7pm. *Museum of the Art Institute, 5pm-9pm.*