

INFORMS OPTIMIZATION SOCIETY Business Meeting - Nov 2006

AGENDA

- 1) Welcome
- 2) Chairs report (Tamás Terlaky)
- 3) Election Results (Tamás Terlaky)
- 4) Treasurer's report (Eva K Lee)
- 5) Report on the Optimization and HealthCare Conference Feb.2006 (Eva K Lee, Allen Holder)
- 6) OS conference 2008 (Eva K Lee, Sanjay Mehrotra)
- 7) "Farkas Prize" Announcement (Tamás Terlaky, Committee Chair)
- 8) "Optimization Prize for Young Researchers" Announcement (John Birge, Committee Chair)
- 9) Discussion: Constitution update

----- Chairs report -----

- New Prizes:
Prize for Young Researchers, OS Student Paper Prize, Farkas Prize.
- New publication products
- Subdivision Council: policies (def. of a society)
members 400+; reports; prizes; confs; WEB; etc.
- Membership growth: 617 -> 663 -> 628 -> 813 -> 874
(Current) Reg: 514 Stud: 348 Retirees: 11 NonInf: 1
(2005) Reg: 483 Stud: 318 Retirees: 7 NonInf: 5
Advertise at sessions, increase awareness.
- Sessions in Pittsburgh: 60 (was 44 in San Francisco)
- Conferences: OS conf. 2006; prepare for 2008;
Pittsburg 11/06; International HK(2006), PR(2007), Seattle 2007.

----- Election results -----

- Thanks to the hardwork of our leaving officers:
Eva K. Lee, Andrzej Ruszczynski, Sven Leyffer, Mohit Tawarmalani
- Incoming officers:
 - . Chair: John Birge (U. Chicago)
 - . Secretary/Treasurer: Eva K. Lee (Georgia Tech)
 - . NLP: Michael Friedlander (UBC)
 - . Global Opt.: Ignacio Grossman (CMU)
 - . Stochastic Prog.: Shabbir Ahmed (Georgia Tech)
- Continuing officers:
 - . Mihai Anitescu, Sanjay Mehrotra, Jean-Philippe P. Richard, Kamal Jain
- Newsletter editor: First issue will be out in January 2007.

----- Treasurer's report -----

- Secretary/Treasurer: Eva K. Lee
- \$11195.85 (01/01/2005)
 - \$13531.27 (30/09/2005)
 - \$1xxxx.xx (30/09/2006) (still awaits INFORMS accountant's report)

----- Optimization and HealthCare Conference 2006 -----

- INFORMS Optimization Society Conference on Optimization and Health Care
- February 3, 2006 - February 5, 2006
 - La Quinta Convention Center, San Antonio, Texas

-- <http://www2.egr.uh.edu/~ginolim/informsOpt>

OS conference 2008

INFORMS Optimization Society Conference 2008 --
Theory, Computation, and Emerging Applications.
-- March 14-16, 2008
-- Atlanta, GA
-- Organizers: Eva K Lee, Sanjay Mehrotra
-- Invitation for organizing sessions will be sent out in early 2007

Farkas Prize

ELIGIBILITY: The author(s) and the contribution must satisfy the following four conditions to be eligible for the prize:
(a) The Farkas Prize is awarded for the most significant contribution to the field of optimization by a researcher, or a team of researchers. The "contribution" maybe a published or submitted and accepted paper, a series of papers, a book, monograph or a software.
(b) the author(s) must have been awarded their terminal degree within 20 years of the closing date of nomination;
(c) the topic of the contribution must belong to the field of optimization in its broadest sense.
(d) the prize may be awarded once in lifetime to any individual.

Judging of the contributions will be based primarily on their quality, significance, impact and originality.

-- Farkas Prize Selection Committee for 2006:
Tamás Terlaky, McMaster University (Committee Chair)
Andrew Conn, IBM T.J. Watson
George Nemhauser, Georgia Institute of Technology
Panos Pardalos, University of Florida, Gainesville
Andrs Prkopa, Rutgers University

-- Optimization Society Farkas Prize Award Winner in 2006

Yinyu Ye
Dept. MS and Engineering, Stanford, CA
For his numerous fundamental contributions to he theory,software and novel applications of optimization

-- Farkas Prize Citation
Yinyu Ye has made several fundamental contributions to the theory of Interior Point Methods (IPMs), such as the first $O(n^3L)$ complexity potential reduction algorithm, the self-dual embedding model, the Mizuno-Todd-Ye predictor-corrector algorithm, the Vavasis-Ye IPM, where the complexity bound is independent of the right-hand side of the constraints and the objective coefficient vector; for his contribution to advancing computational methods, including the first implementation of the embedding model that is now part of many IPM software applications, for developing efficient IPMS for Geometric Programming (GP) and also for the unique till today - DSPDP dual IPM based semidefinite optimization software package; for his influential contributions to approximation results for non-convex quadratic and combinatorial optimization problems, in particular for the development of a highly efficient approximation algorithm for the facility location problem, where the bound remains the best to date; for his deep, influential results in solving engineering and econometric problems, including novel complexity results for the Markov decision problem, and where his algorithm has become a major tool for solving GP problems arising in electrical engineering/communication systems, analog and digital circuit design, and many other engineering optimization problems.

Congratulations to Yinyu!!!

Optimization Prize for Young Researchers

PRINCIPAL GUIDELINE. The Optimization Prize for Young Researchers, established in 1998, revised 2006, administered by the Optimization Society (OS) within the INFORMS, is awarded annually at the INFORMS Fall National Meeting to one (or more) young researchers for the most outstanding paper in optimization that is submitted to or published in a refereed professional journal. The prize serves as an esteemed recognition of promising colleagues who are at the beginning of their academic or industrial career.

ELIGIBILITY. The authors and paper must satisfy the following three conditions to be eligible for the prize:

- (a) the paper must either be published in a refereed professional journal no more than three years before the closing date of nomination, or be submitted to and received by a refereed professional journal no more than three years before the closing date of nomination;
- (b) all authors must have been awarded their terminal degree within eight years of the closing date of nomination;
- (c) the topic of the paper must belong to the field of optimization in its broadest sense.

-- Optimization Prize for Young Researchers Award Winner in 2006

Emre Alper Yildirim

Dept. I.E. Bilkent U. Ankara, Turkey

For his paper "On the Minimum Volume Covering Ellipsoid of Ellipsoids", SIAM J. Optimization 17 (2006) 621-641,

-- Prize Citation

Paper presents a novel polynomial-time algorithm for computing a $(1+\epsilon)$ -approximation of the minimum-volume covering ellipsoid of the convex hull of a given finite number of ellipsoids. The problem of finding such a covering arises in a variety of applications such as computational geometry, computer graphics, robotics, and nuclear engineering, where high-efficiency computation requires replacing complex objects with simpler representations. In this paper, the author generalizes previous results on covering a finite set of points by developing an innovative semi-definite programming formulation that leads to the surprising result that the asymptotic complexity of computing the ellipsoid-covering is the same as that for the point-covering, despite the very different topologies of these sets. With a fluid style and clear presentation, the paper also illustrates potential extensions to other input sets and forms a solid foundation for further studies in this area.

Congratulations to Alper!!!

Constitution discussion

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- Goal: Update conform with INFORMS Special Interest Group (SIG) structure and to reflect the 7 disciplines represented by Vice Chairs
 - Issue: Legislate how to form, suspend and eliminate, SIGs = discipline representations within the Optimization Society.
 - Minor issue: Extend the term of the Secretary Treasurer from 1 year to 3 years.

1st-ever INFORMS Puerto Rico meeting!

Update from Robin Lougee-Heimer

Karla Hoffman, General Chair

Highlights:

- Most luxurious hotel on island beautiful beachfront and spa
- Sponsored receptions (think Bacardi, rainforest, tropical barbecue, Old San Juan)
- Speakers from Central and South Americas
- Hands-on tutorials, high-school teachers workshop,
- Custer (10+ sessions) on industry's unsolved problems
- University of Puerto Rico sponsored
- Key focuses: Optimization cluster, and HealthCare and Medicine cluster
- Help make this meeting the best ever! Organize sessions, give talks, attend
- Abstract deadline: February 1, 2007
- Send evakylee@isye.gatech.edu a note regarding sponsoring sessions/cluster

Thanks

Thanks to all of you for supporting the INFORMS Optimization Society.
See you again in Seattle, WA, November 2007 at the 2007 INFORMS meeting.

Eva K Lee

Secretary/Treasurer

INFORMS Optimization Society

evakylee@isye.gatech.edu

