

TSL News and Notes

AND THE AWARD GOES TO...

Paolo Toth: Recipient of the Robert Herman Lifetime Achievement Award

Committee: Warren Powell, chair; Jaime Barcelo; Michel Gendreau; Pitu Mirchandani; Uwe Zimmerman

The Transportation and Logistics Section of INFORMS is proud to confer the Robert Herman Lifetime Achievement Award to Professor Paolo Toth. Professor Toth's academic career spans more than 35 years. He started in Computer Science at the University of Bologna, but has been Professor of Combinatorial Optimization at the University of Bologna since 1983.

Professor Toth is a leading expert in Combinatorial Optimization and Graph Theory, and in the application of these fields to real-world problems. Throughout his career he has developed several original and powerful theoretical results, algorithms and computer implementations for the solution of large scale problems arising in transportation and logistics. These include the traveling salesman problem and its extensions, vehicle routing and scheduling, dial-a-ride services, crew rostering, natural gas transportation, train timetabling, and locomotive planning. He has authored or coauthored more than 110 publications on these topics and other combinatorial optimization problems in the best journals of our profession. He has coauthored one book on Knapsack Problems together with Silvano Martello, and he has edited several other books on Combinatorial Optimization, Network Optimization, Transportation Analysis and Vehicle Routing.

In 1994 and 1995, he received the first prizes in the FASTER and FARO competitions organized by the Italian State Railways ("Ferrovie dello Stato") and the Italian Operations Research Society ("AIRO"). These prizes were awarded for the design and implementation of effective heuristics for the solution of large scale set covering problems and crew rostering problems.

It is difficult to think of a more deserving recipient for the Robert Herman Lifetime Achievement Award. A gentleman and a scholar, Paolo Toth is truly a model and a source of inspiration for the transportation and logistics community.

Mochia and Gao honored with TSL Dissertation Award/Mention

Committee: Randy Hall, chair; Andy Philpott; Don Hearn; Mark Hickman

First Prize goes to Luigi Mochia, Università della Calabria in Italy, advisors: Jean-Francois Cordeau, Manlio Gaudioso and

Gilbert Laporte.

Honorable mention to Song Gao of MIT, advisor Moshe Ben Akiva

Congratulations to the winners!

Kleywegt, Nori and Savelsbergh receive the TSL Best Paper Award

Committee: Nigel Wilson, chair; Paolo Toth; Warren Powell

Award winning paper: "Dynamic Programming Approximations for a Stochastic Inventory Routing Problem" by Anton Kleywegt, Vijay Nori, and Martin Savelsbergh.

The Council of University Transportation Centers Award Winners

The following are the winners of this year's six CUTC awards:

Pikarsky Award for Outstanding Ph.D.
Dissertation in Science and Technology: Dr.
Carol H. Tan, The Pennsylvania State University

Wootan Award for Outstanding Ph.D.
Dissertation in Policy and Planning: Dr. Sangho
Choo, University of California at Davis

Pikarsky Award for Outstanding M.S. Thesis in
Science and Technology: Mr. Pradeep K.
Gulipalli, The University of Texas at Austin

Wootan Award for Outstanding M.S. Thesis in
Policy and Planning: Ms. Brenda M. Cruz,
Rensselaer Polytechnic Institute

Parker Award for Outstanding Non-thesis
Masters Degree Paper in Science and
Technology: Ms. Dan You, University of Illinois
at Chicago

Parker Award for Outstanding Non-thesis
Masters Degree Paper in Policy and Planning:
Mr. Paul A. Sorensen, University of California at
Los Angeles

The awards will be presented during the annual
Awards Banquet of the Council of University
Transportation Centers, to be held Saturday,
January 21, 2006, in the Palladian Ballroom of
the Omni Shoreham Hotel in Washington , DC .

Congratulations to all of this year's award
winners!

The Council of University Transportation Centers (CUTC) was established in 1979 by the major transportation research centers and institutes in the United States . CUTC promotes continued dialogue among its member institutions, and it provides a forum for the centers to interact collectively with government and industry.

BIG NEWS

TSL Sponsored Session on *Studies in the Economics of Transportation*

On November 14, 2005, at the INFORMS National Meeting in San Francisco, California, two sessions were sponsored by the Transportation and Logistics Section of INFORMS to mark the 50th Anniversary of the publication of *Studies in the Economics of Transportation*. The book, co-authored by Martin Beckmann, C. Bart McGuire, and Christopher B. Winsten, was published in 1956 by Yale University Press. Both Professors Beckmann and McGuire were in attendance at the sessions and at the conclusion of the sessions shared their reflections on the book with the audience. Speaking at the sessions were Professors David Boyce, Michael Florian, Don Hearn, Hani S. Mahmassani, Anna Nagurney, and Tim Roughgarden. For additional information, see <http://supernet.som.umass.edu/classics.htm>



Special Issue of Transportation research Part E: Global Logistics

Global Logistics ! The world is a smaller place because of advancements in communication and transportation. The former facilitates the logistics of production and inventory over wider geographic areas; the latter of course makes possible the actual transactions between nodes. It is now often

the case that components are produced in one country, assembled into products in a second, for distribution and sale in multiple other countries.

For the past few years, Professor James Bookbinder has been working on various topics concerning International Supply Chains. These include a comparison of Logistics Systems in the European Community with those in Asia , as well as his ongoing research concerning NAFTA.

Professor Bookbinder was recently Guest Editor of a special issue (Vol. 41, No. 6, 2005) of *Transportation Research E* on "Global Logistics." The special issue includes papers specifically about Europe and NAFTA, as well as articles that treat international logistics questions not confined to particular regions. At the website below are contents of that issue, plus a copy of his editorial that preceded those articles.

The special issue can be found at the following website <http://www.sciencedirect.com/science/journal/13665545> (Follow the links to Volume 41, Issue 6)

Sadly, Bart McGuire passed away on January 23, 2006 after battling cancer.

Introducing the Transportation Economics and Management Research Center in Brescia

Maria Grazia Speranza informs us that with the beginning of 2006, a new research center will start its activities in Brescia : The research center on Transportation Economics and Management. The center has been promoted by the Operations Research group and by a group of researchers in Economics. It aims at becoming a reference point for all the research activities in the area of transportation at the University of Brescia , attract young promising researchers, promote contacts and projects.

New Book on the Economic Impacts of Terrorist Attacks

University of Southern California Professors Harry W. Richardson , Peter Gordon, and Jim Moore have published and edited volume, *THE ECONOMIC IMPACTS OF TERRORISTS ATTACKS*, Edward Elgar Publishing: North Hampton , 2005. The book includes papers from prominent scholars on an array of topics, including several papers relating to transportation systems.

The volume includes papers presented at a USC symposium on the same topic in August of 2004. The symposium was sponsored by the USC Center for Risk and Economic Analysis of Terrorism Events (CREATE), the first university center of excellence funded by the US Department of Homeland Security. CREATE's founding Director is TSL member Prof. Randolph W. Hall. The current Director is INFORMS Fellow and Decision Analysis Society

past-President Prof. Detlof von Winterfeldt.

Harry W. Richardson is the James Irvine Professor of Urban and Regional Planning in the USC School of Policy, Planning, and Development and the Department of Economics. Peter Gordon is a Professor Policy, Planning, and Development; and of Economics. Jim Moore is chair of the Daniel J. Epstein Department of Industrial and Systems Engineering at USC, and holds additional appointments in Civil Engineering and Public Policy.

Richardson, Gordon, and Moore organized a second CREATE symposium held in August of 2005. Papers presented there will be published by Elgar in a second edited volume, *THE ECONOMIC COSTS AND CONSEQUENCES OF TERRORIST ATTACKS*, to appear in 2006. A third symposium is planned for 2006.

Facility Logistics SIG News

Russell D. Meller (Chair of Facility Logistics SIG) has moved to the University of Arkansas as the Hefley Professor of Logistics and Entrepreneurship and Director of an NSF-funded research center focused on engineering logistics and distribution (CELDi). Congratulations can be sent to Russ at rmeller@uark.edu.

The 9th International Material Handling Research Colloquium (IMHRC) will be held June 11-15, 2006 in Salt Lake City, Utah, USA. The purpose of the Colloquium is to share research accomplishments and directions in the field of material handling and facility logistics. More information on the IMHRC can be found at: www.mhia.org/cicmhe/colloquium


Georgia Tech researchers continue work on benchmarking distribution centers or warehouses online. Andy Johnson, a Ph.D. student working in the group sends this description: Every warehouse and distribution center is different but, for all, the key to success is effectively using resources to deliver required services. An online self-assessment tool for benchmarking facility performance has been developed at Georgia Tech by Leon McGinnis, Wen-chih Chen, and Andy Johnson with the cooperation of Material Handling Industry of America's Logistics Execution Systems Association (LESA) and Order Fulfillment Council (OFC). This system-based analysis goes beyond conventional single-factor productivity metrics (picks/hr, cube/line) to provide a "system view" of warehouse performance. It computes a single "efficiency score" based on a set of resources used. One of the tools currently being offered is specifically for warehousing and is available www.isye.gatech.edu/ideas, but the same ideas and methods can work for other applications as well, such as transportation, point-of-use storage, or distribution. Currently, warehouse information is compared to information from all

other warehouses in the database. A "system performance index" is computed using data envelopment analysis, considering all inputs (resources) and outputs (results). This project is on going and available free of charge to warehouse managers via the website stated above. Any questions or comments can be directed to ideas@isye.gatech.edu .

Kevin Gue (Vice Chair of Facility Logistics SIG) continues work on Very High Density (VHD) storage systems, which he uses to explore the tradeoff between storage density and expected retrieval time. In a paper about to appear in *IIE Transactions* , Gue addresses the problem of storing items to maximum density without violating a constraint on lane depth. In his ongoing work, he is looking at storage systems based on the 15-puzzle, a classic children's game in which tiles move within a simple grid. Such systems may be viewed as having maximum possible density. For details, contact Kevin directly: kevin.gue@auburn.edu .

Recently, Haluk Yapicioglu and Alice E. Smith from Auburn University and Bryan A. Norman from the University of Pittsburgh have been working on a new model for retail store design. Unlike previous models that almost exclusively focus on the shelf space allocation, they are interested in the spatial design of the whole store area. They utilize and combine ideas from both the shelf space allocation and the manufacturing facility layout literature in building their model. Their preliminary model considers the area allocated to the departments, exposure of the departments to the aisle structure of the store, and adjacency requirements among departments subject to spatial constraints imposed on the departments. An interesting constraint on the layout is that the aisle structure of the store needs to be in the form of a racetrack. Due to the complex nature of the model, one of the meta-heuristic search methods, Tabu search, is employed to solve the problem. Currently, they are analyzing the behavior of the model and solution methodology on example problems. For details, contact Haluk directly: yapicha@auburn.edu



 Text Box: Fig. An example

ANNOUNCEMENTS: Short courses and conferences

Short Course on Discrete Choice Analysis

A short course on discrete choice analysis is being organized in Lausanne for March. For more information see <http://roso.epfl.ch/DCA/> Lecturers include Michel Bierlaire, Dan McFadden, Moshe Ben-Akiva, and Denis Bolduc.

A limited number of scholarships are available to full-time teaching staff (rank of instructor or higher) of academic institutions. Moreover, one full-tuition fellowship will be awarded to one outstanding PhD student. The details are available on the web page.

Spring School on Vehicle Routing

The Spring School on Vehicle Routing, organized by Jean-Francois Cordeau and Gilbert Laporte, will be held in Montreal on May 10 to 12, 2006. For more information, see the website: http://www.hec.ca/chairedistributique/en/school2006_en.shtml The Spring School will be immediately preceded by the Annual Conference of the Canadian Operational Research Society (CORS) and Optimization Days, which will be held jointly from May 8 to 10 at HEC Montréal. Website: <http://www.crt.umontreal.ca/scrojopt2006/en>

Call for Papers: CASPT 2006

10th International Conference on Computer-Aided Scheduling of Public Transport
Leeds, U.K., June 21 - 23, 2006

(Previous events: San Diego, 2004, Berlin, 2000, Boston, 1997, Lisbon, 1993, Montreal, 1990, Hamburg, 1987, Montreal, 1983, Leeds, 1980, Chicago, 1975)

Conference web page:

<http://www.comp.leeds.ac.uk/caspt06/index.php>

This conference is the tenth in a series of conferences that serve as a forum for an international community of researchers, practitioners and vendors on all aspects of computer-aided planning, scheduling and controlling passenger transport.

CASPT is a traditional scientific program that covers significant contributions to the theory and application of public transport planning and scheduling. CASPT will encourage not only the generation of new ideas, but will also motivate a productive collaboration between the participants. The themes of the conference include (but are not limited to):

- o Network and route planning
- o Timetables planning and generation
- o Vehicle (bus, train, tram, ferry, ...) scheduling

- o Driver and crew scheduling
- o Rostering
- o Operations monitoring, control and management
- o Passenger information and trip planning
- o Practical experiences and case studies
- o Commercial packages

Submissions:

Authors are invited to submit presentations in one of two categories:

(a) Full Papers

Authors should submit papers describing significant, original and

unpublished work. Such papers are expected to be approximately 10-20 pages in length but this guideline is not strict. These papers will be fully refereed by the programme committee.

(b) Abstracts

Abstracts of up to 1000 words in length (2-4 pages) can be submitted by those who wish to give a talk but do not want to write an academic paper. Abstracts will be fully refereed.

Post conference publications:

We are planning, as in previous conferences of the series, to publish a post conference volume of selected papers.

Previous volumes were published by Springer. The second round of refereeing for this volume will take place shortly after the conference. Authors of accepted abstracts will have the opportunity to write a paper (based on their abstract) and submit it for the selected papers volume.

Paper formats, style and submission:

Please check the following web page

http://www.comp.leeds.ac.uk/caspt06/index.php?option=com_content&task=view&id=17&Itemid=32

Deadlines:

Paper/abstract submissions	January 10, 2006
Notification	February 20, 2006

Programme Committee:

Raymond Kwan (United Kingdom) - Conference Chair

Avi Ceder (Israel)

Joachim R. Daduna (Germany)

Mark Hickman (USA)

Hong Lo (Hong Kong)

Pitu Mirchandani (USA)

Jean-Marc Rousseau (Canada)

Paolo Toth (Italy)

Stefan Voss (Germany)

Nigel H.M. Wilson (USA)

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Reminder: The new TSL mailing list is <transci-logistics-section@list.informs.org>. Members who do not get email sent to the TSL mailing list should let the TSL secretary.

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