RESUME

Edwin Romeijn

Full name   : Hilbrand Edwin Romeijn
Current position : Jill Stewart Archer Family Chair and Professor
Office address   : H. Milton Stewart School of Industrial and Systems Engineering
                    Georgia Institute of Technology
                    ISyE Main Building, Room 206
                    755 Ferst Drive NW
                    Atlanta, Georgia 30332-0205
E-mail   : edwin.romeijn@isye.gatech.edu

Degrees

Ph.D. in Economics (Operations Research), Erasmus University Rotterdam, The Netherlands, September 1992. Dissertation: "Global Optimization by Random Walk Sampling Methods". Advisors: A.H.G. Rinnooy Kan, R.L. Smith.

M.S. in Econometrics, Erasmus University Rotterdam, The Netherlands, June 1988. Master's thesis: "Shake-and-Bake algorithms for generating uniform points on the boundary of bounded polyhedra". Advisor: C.G.E. Boender.

First year (propaedeutic) diploma in Computer Science, Erasmus University Rotterdam, The Netherlands, August 1985.

Professional employment

January 2025-present:
    Jill Stewart Archer Family Chair and Professor, H. Milton Stewart School of Industrial and Systems Engineering, Georgia Institute of Technology, Atlanta, Georgia.

January 2015-December 2024:
    H. Milton and Carolyn J. Stewart School Chair and Professor, H. Milton Stewart School of Industrial and Systems Engineering, Georgia Institute of Technology, Atlanta, Georgia.

August-December 2014:
    Program Director for Operations Research (OR), Division of Civil, Mechanical and Manufacturing Innovation (CMMI), National Science Foundation, Arlington, Virginia.

September 2012-September 2014:
    Program Director for Service Enterprise Systems (SES) and Manufacturing Enterprise Systems (MES), Division of Civil, Mechanical and Manufacturing Innovation (CMMI), National Science Foundation, Arlington, Virginia.

September 2008-December 2014:
    Professor, Department of Industrial and Operations Engineering, University of Michigan, Ann Arbor, Michigan.

August 2006-August 2008:
    Professor, Department of Industrial and Systems Engineering, University of Florida, Gainesville, Florida.

August 2002-August 2006:
  Associate Professor, Department of Industrial and Systems Engineering, University of Florida, Gainesville, Florida.
October 1999-August 2002:
  Assistant Professor, Department of Industrial and Systems Engineering, University of Florida, Gainesville, Florida.
October 1993-September 1999:
  Assistant Professor, Department of Decision and Information Sciences, Rotterdam School of Management, Erasmus University Rotterdam, Rotterdam, The Netherlands.
September 1992-September 1993:
  Postdoctoral fellow, Department of Industrial Engineering and Operations Research, Columbia University, New York, New York.
June 1988-June 1992:
  Assistant researcher (a.i.o.), Department of Operations Research, Econometric Institute/Tinbergen Institute, Erasmus University Rotterdam, Rotterdam, The Netherlands.
January 1986-May 1988:
  Research/teaching assistant, Department of Econometrics, Econometric Institute, Erasmus University Rotterdam, Rotterdam, The Netherlands.
July-December 1985:
  Teaching assistant, Department of Probability Theory and Statistics, Econometric Institute, Erasmus University Rotterdam, Rotterdam, The Netherlands.

Visiting positions
June 9-23, 2008:
  Visiting scholar, Econometric Institute, Erasmus University Rotterdam, Rotterdam, The Netherlands.
June 17-21, 2007:
  Visiting scholar, Division of Optimization and Systems Theory, Department of Mathematics, Royal Institute of Technology (KTH), Stockholm, Sweden.
May 14-17, 2007:
  Visiting scholar, Management School and Economics, University of Edinburgh, Edinburgh, U.K.
January-April 2007:
  Visiting professor, Department of Civil and Environmental Engineering, Massachusetts Institute of Technology, Cambridge, Massachusetts.
November-December 2006:
  Visiting scholar, Department of Industrial Engineering, University of Pittsburgh, Pittsburgh, Pennsylvania.
September-October 2006:
  Visiting scholar, Department of Industrial Engineering and Operations Research, University of California, Berkeley, California.
August 12-19, 2005:
  Visiting scholar, Saïd School of Business, University of Oxford, Oxford, U.K.
July 21-August 21, 2002:
  Visiting professor, Department of Decision and Information Sciences, National University of Singapore, Singapore.

May 21-June 21, 2002:
   Visiting professor, Faculty of Economics and Business Administration, Maastricht University, Maastricht, The Netherlands.
January 21-March 6, 1998; June 1996; August 1994:
   Visiting scholar, Department of Industrial and Operations Engineering, University of Michigan, Ann Arbor, Michigan.
April 1996:
   Visiting professor, Department of Automatic Control and Production Engineering, Ecole des Mines de Nantes, Nantes, France.
February 1992; May-June 1991; September-December 1990; April-June 1990; January-August 1989:
   Visiting assistant research scientist, Department of Industrial and Operations Engineering, University of Michigan, Ann Arbor, Michigan.

Honors and awards

- "You Can't Spell Edwin Without Win!" Award, in recognition of support for junior faculty and inspiring leadership, JFIG, H. Milton Stewart School of Industrial and Systems Engineering (2025).

- Fellow, Institute for Operations Research and the Management Sciences (INFORMS; 2017).

- Fellow, Institute of Industrial and Systems Engineers (IISE; 2017).

- Richard C. Wilson Faculty Scholar, Department of Industrial and Operations Engineering, University of Michigan (January 2012-December 2014).

- 2011 Department Award, College of Engineering, University of Michigan.

- Featured article (http://iol-a.informs.org/site/OperationsResearch/):
   H.E. Romeijn, R.K. Ahuja, J.F. Dempsey, and A. Kumar. A new linear programming approach to radiation therapy treatment planning problems. *Operations Research* 54:2 (2006), 201-216.

- 2006 Industrial Engineering Research Conference Best Paper Award, Service Systems Track.

- 2005 Industrial Engineering Research Conference Best Paper Award, Logistics and Inventory Track.

- 2004 Young Investigator's Award for paper presented at the International Conference on the use of Computers in Radiotherapy (ICCR) in Seoul, Korea, May 2004.

- 2003 Pierskalla Best Paper Award, INFORMS Health Applications Section.

- Research fellow, ERASM, September 1996-September 1999.

- External research fellow, Tinbergen Institute, May 1994-September 1999.

- Finalist, 1993 George E. Nicholson Student Paper competition (ORSA).

- 1989 Master's thesis prize of the Netherlands Society for Statistics and Operations Research (VVS).

Service

- *School/Department*

  – Chair, Faculty Advisory Committee, H. Milton Stewart School of Industrial and Systems Engineering, Georgia Tech (July 2025-present).

  – Member, Mentoring Committee, H. Milton Stewart School of Industrial and Systems Engineering, Georgia Tech (July 2025-present).

  – Member, Comprehensive Exam Committee, Ph.D. in Operations Research, H. Milton Stewart School of Industrial and Systems Engineering, Georgia Tech (May 2025-present).

  – Member, Jarvis Best Paper Award Committee (July-August 2025).

  – Chair, Graduate Admissions and Financial Aid Committee, IOE Department, University of Michigan (September 2011-August 2012).

  – Area Coordinator, Production Distribution and Logistics Area, IOE Department, University of Michigan (September 2010-August 2012).

  – Member, Honors and Awards Committee, IOE Department, University of Michigan (September 2008-August 2012).

  – Member, Murty Prize Committee, IOE Department, University of Michigan (September 2008-August 2011).

  – Chair, Wilson Prize Committee, IOE Department, University of Michigan (September 2009-August 2011).

  – Member, Graduate Admissions and Financial Aid Committee, IOE Department, University of Michigan (September 2009-August 2011).

  – Member, Department Committee, IOE Department, University of Michigan (September 2009-August 2011).

  – Member, Ad-hoc committee to restructure the IOE Ph.D. program, IOE Department, University of Michigan (February-May 2011).

  – Chair, Faculty Search Committee, IOE Department, University of Michigan (September 2010-April 2011).

  – Member, Promotion Casebook Committee, IOE Department, University of Michigan (September-December 2010).

  – Area Coordinator, Operations Research Area, IOE Department, University of Michigan (September 2009-August 2010).

  – Seminar Coordinator, IOE Department, University of Michigan (September 2009-April 2010).

  – Chair, Graduate Committee and Graduate Coordinator, Department of Industrial and Systems Engineering, University of Florida (August 2007-August 2008; August 2004-August 2006).

  – Member, Graduate Committee, Department of Industrial and Systems Engineering, University of Florida (January 2001-August 2004).

  – Member, ABET committee, Department of Industrial and Systems Engineering, University of Florida (August 2000-August 2005).

- *College*
  - Chair, Search Committee for the Steve W. Chaddick School Chair of the School of Electrical and Computer Engineering (August 2017-April 2018).
  - Chair, IOE Internal Review Committee, College of Engineering, University of Michigan (December 2009-October 2010).

- *Institute*
  - Member, Student Honor Committee (August 2025-present).
  - Member, AdminX Campus Representatives team (March 2022-December 2024).
  - Member, Advisory Committee of Transdisciplinary Research Institute for Advancing Data Science (TRIAD) (August 2017-present).
  - Member, Internal Advisory Council, Center for Machine Learning, Georgia Institute of Technology (September 2017-present).
  - Member, Committee to evaluate and revise Georgia Tech's research misconduct policy (May 2022-May 2023).
  - Member, Steering Committee on Workforce of the Future, Georgia Institute of Technology (September 2015-August 2017).

- *Other institutions*
  - Member, Clemson Industrial Engineering Advisory Board (IEAB), Department of Industrial Engineering, Clemson University (November 2025-present).
  - Member, Liaison Committee, Department of Industrial Engineering, University of Arkansas (2018-2019).
  - Academic Program Review:
    * Department of Industrial Engineering, University of Arkansas (2021).
    * Department of Industrial & Enterprise Systems Engineering, University of Illinois at Urbana-Champaign (2015).

- *Editorships*
  - Board Member, Wiley Book Series on *Advances in Industrial and Systems Engineering* (2023-present).
  - Associate Editor, *IIE Transactions* (2009-2019).
  - Associate Editor, *International Journal of Inventory Research* (2006-present).
  - Area Editor, Optimization and Health Care Systems Applications, *Omega* (2014-2015).
  - Associate Editor, *Omega* (2010-2014).
  - Associate Editor, *Optimization Letters* (2008-2012).
  - Associate Editor, *Journal of Global Optimization* (1994-2009).
  - Guest Editor (with Stefanos Zenios), *Operations Research* 56:6 (2008), Special issue on "Operations Research in Health Care".

- Guest Editor,*Journal of Global Optimization* 26:1 (2003), Special issue on "Supply Chain Optimization".

- *Other professional activities*

  - Chair, INFORMS ACORD (Association of Chairs of OR Departments) (2017).
  - Member, INFORMS QSR Advisory Board (2020-present).
  - Awards Committees:
    * Member, IISE Fellows Selection Committee (2021-present).
    * Chair, Best Paper Award Selection Committee, Operations Engineering and Analytics Focused Issue, IISE Transactions (August-November 2025).
    * Member, INFORMS Fellows Selection Committee (2022-2024).
    * Chair, IISE Dr. Hamed K. Eldin Outstanding Early Career in Industrial Engineering Award (2023).
    * Member, INFORMS Sanjay and Panna Mehrotra Research Excellence Award Committee (2022).
    * Chair, INFORMS Sanjay and Panna Mehrotra Research Excellence Award Committee (2020).
    * Member, INFORMS Nicholson Prize Committee (2004, 2005, 2010, 2011).
    * Member, INFORMS Pierskalla Prize Committee (2009).
    * Member, MSOM Student Paper Competition Prize Committee (2009).
    * Member, INFORMS Optimization Student Paper Prize Committee (2007).
    * Member, INFORMS JFIG Paper Competition Prize Committee (2004, 2006, 2007).
    * Chair, INFORMS Pierskalla Prize Committee (2004).
  - Conference organization:
    * General Co-Chair (with Juan Pablo Vielma), INFORMS Annual Meeting, Atlanta, Georgia (2025).
    * Member of the Steering Committee, International Workshop on Lot Sizing (IWLS), 2011-2024.
    * Program Co-Chair (with Andrew Schaefer), IISE Conference, Orlando, Florida (2019).
    * Program Chair, INFORMS Conference on Healthcare, Rotterdam, The Netherlands (2017).
    * Invited cluster organizer (with Andrew Schaefer), 22nd International Symposium on Mathematical Programming, Pittsburgh, Pennsylvania (2015).
    * Invited session chairman, INFORMS, Phoenix, Arizona (2012).
    * Invited session chairman, 21st International Symposium on Mathematical Programming, Berlin, Germany (2012).
    * Invited session chairman, INFORMS Optimization Society Conference, Coral Gables, Florida (2012).
    * Invited session chairman, INFORMS, Charlotte, North Carolina (2011).
    * Invited track organizer, INFORMS Midwest, Columbus, Ohio (2011).

* Sponsored cluster chairman, INFORMS Optimization Society, INFORMS Healthcare, Montréal, Canada (2011).
* Sponsored session chairman, INFORMS Healthcare, Montréal, Canada (2011).
* Invited session chairman, INFORMS, Austin, Texas (2010).
* Invited session chairman, INFORMS, San Diego, California (2009).
* Invited session chairman, CORS/INFORMS International Meeting, Toronto, Ontario, Canada (2009).
* Invited track organizer (with Max Shen), IERC Miami, Florida (2009).
* Invited session chairman, INFORMS Computing Society Conference, Charleston, South Carolina (2009).
* Invited session chairman, INFORMS, Washington, D.C. (2008).
* Sponsored cluster organizer (with Jay Rosenberger), INFORMS, Seattle, Washington (2007).
* Invited session chairman, INFORMS, Seattle, Washington (2007).
* Invited cluster organizer, INFORMS International, Puerto Rico (2007).
* Invited session chairman, INFORMS, Pittsburgh, Pennsylvania (2006).
* Invited session chairman, 19th International Symposium on Mathematical Programming, Rio de Janeiro, Brazil (2006).
* Invited session chairman, INFORMS International, Hong Kong (2006).
* Invited session chairman, Industrial Engineering Research Conference, Orlando, Florida (2006).
* Invited session chairman, INFORMS, San Francisco, California (2005).
* Invited session chairman, IFORS, Honolulu, Hawaii (2005).
* Invited session chairman, SIAM Optimization, Stockholm, Sweden (2005).
* Invited session chairman, INFORMS, Denver, Colorado (2004).
* Invited cluster organizer, INFORMS, Miami Beach, Florida (2001).
* Discussion group leader "Stochastic methods for global optimization of noisy objective functions", Stochastic Global Optimization Workshop, Hanmer Springs, New Zealand (2001).
* Invited cluster organizer, INFORMS International, Maui, Hawaii (2001).
* Invited session chairman, 16th International Symposium on Mathematical Programming, Lausanne, Switzerland (1997).
* Invited session chairman, 15th International Symposium on Mathematical Programming, Ann Arbor, Michigan (1994).
- Professional societies:
  * Treasurer, INFORMS Health Applications Section (2005).

- *Refereeing*

  - Journal articles: *ACM Transactions on Modeling and Computer Simulation*; *Annals of Operations Research*; *Computational Optimization and Applications*; *Discrete Applied Mathematics*; *European Journal of Operational Research*; *IEEE Transactions on Systems, Man, and Cybernetics*; *IEEE Transactions on Evolutionary Computation*; *IEEE*

Transactions on Intelligent Transportation Systems; *IIE Transactions*; *INFOR*; *International Journal of Radiation Oncology Biology Physics*; *Journal of Computer-Aided Civil and Infrastructure Engineering*; *Journal of Global Optimization*; *Journal of Optimization Theory and Applications*; *Journal of Scheduling*; *Linear Algebra and its Applications*; *Management Science*; *Mathematical Methods of Operations Research*; *Mathematical Programming*; *Medical Physics*; *Naval Research Logistics*; *Omega*; *Operations Research*; *Operations Research Letters*; *Physics in Medicine and Biology*; *SIAM Journal on Optimization*; *Statistica Neerlandica*; *Stochastic Models*; *Telecommunications Systems*; and *Transportation Science.*

- Book chapter: *Quantitative Approaches to Distribution Logistics and Supply Chain Management.*

- Funding institutions: *Marsden Fund of The Royal Society of New Zealand*; *National Institutes for Water Resources*; *National Science Foundation (NSF)*; *Natural Sciences and Engineering Research Council of Canada (NSERC)*; *Swedish Research Council.*

- *Membership of professional societies*

  - Senior Member, Institute for Operations Research and the Management Sciences (INFORMS)

  - Member, Mathematical Optimization Society (MOS), Society for Industrial and Applied Mathematics (SIAM), Institute of Industrial and Systems Engineers (IISE), American Association of Physicists in Medicine (AAPM), American Association for the Advancement of Science (AAAS)

Ph.D. students (in process)

[1] Vivian Yang. 2025-present (Co-chairman with Kamran Paynabar).

[2] Stefan Faulkner. 2025-present (Co-chairman with David Goldsman).

[3] Xiaotian Liu. 2025-present (Co-chairman with Christos Alexopoulos).

Ph.D. students (graduated)

[1] Zhiqiang (Brian) Zhou. *Theory and Applications of First-Order Methods for Convex Optimization with Function Constraints.* July 16, 2020 (Co-Chairman with Guanghui Lan). Research Scientist, Alibaba Group.

[2] Victor Wu. *Non-convex Problems in Radiation Therapy Treatment Planning.* June 30, 2017 (Co-Chairman with Marina Epelman). (Rackham Merit Fellowship recipient.) Research Scientist, Amazon.

[3] Zohar Strinka. *Supplier Choice: Market Selection under Uncertainty.* March 22, 2016 (Co-Chairman with Jon Lee). (Rackham Merit Fellowship and National Defense Science and Engineering Graduate (NDSEG) Fellowship recipient.) Consultant, Denver, Colorado.

[4] Troy Long. *Optimization Problems in Radiation Therapy Treatment Planning.* July 6, 2015 (Co-Chairman with Marina Epelman). (2011 IOE Bonder Fellowship for applied Operations Research recipient. National Science Foundation Graduate Research Fellowship recipient. 2014-15 IOE Outstanding Graduate Student and Richard and Eleanor Towner Prize for Distinguished Academic Achievement.) Senior Applied Scientist, Radformation.

[5] Ilbin Lee. *Analysis and Simplex-type Algorithms for Countably Infinite Linear Programming Models of Markov Decision Processes.* April 21, 2015 (Co-Chairman with Marina Epelman). Associate Professor (with tenure), Alberta School of Business, University of Alberta, Edmonton, Alberta, Canada.

[6] Fei Peng. *Optimization Methods for Volumetric Modulated Arc Therapy and Radiation Therapy Under Uncertainty.* May 7, 2013 (Co-Chairman with Marina Epelman). (2010 IOE Bonder Fellowship for applied Operations Research recipient.) Senior Software Engineer, Facebook, Seattle, Washington.

[7] Arleigh Waring. *Risk-Averse Selective Newsvendor Problems.* August 6, 2012 (Chairman). (Rackham Merit Fellowship and National Science Foundation Graduate Research Fellowship recipient.) AVP of Transformation Management, Montefiore Medical Center, Bronx, New York.

[8] Ehsan Salari, *Integrating Delivery Issues in Intensity-Modulated Radiation Therapy Treatment Plan Optimization.* June 3, 2011 (Chairman). Associate Professor (with tenure), Industrial and Manufacturing Engineering Department, Wichita State University, Wichita, Kansas.

[9] Chunhua Men, *Optimization Models for Radiation Therapy: Treatment Planning and Patient Scheduling.* July 15, 2009 (Chairman). Senior Research Scientist, Elekta AB, Maryland Heights, Missouri.

[10] Mehmet Önal, *Extensions to the Economic Lot Sizing Problem.* June 19, 2009 (Chairman). Assistant Professor, Özyeğin University, Istanbul, Turkey.

[11] Chase Rainwater, *Resource Constrained Assignment Problems with Flexible Customer Demand.* June 18, 2009 (Co-Chairman with Joseph Geunes). Professor and Department Head, Department of Industrial Engineering, University of Arkansas, Fayetteville, Arkansas.

[12] Thomas C. Sharkey, *Approaches to Nonlinear and Infinite-dimensional Network Design Problems in Supply Chain Optimization.* April 11, 2008 (Chairman). (National Science Foundation CAREER award recipient. National Science Foundation Graduate Research Fellowship recipient. 2007 ISE Graduate Student Research Award recipient.) Professor (with tenure), Department of Industrial Engineering, Clemson University, Clemson, South Carolina.

[13] Dionne M. Aleman (†2025), *Optimization Methods in Intensity Modulated Radiation Therapy Treatment Planning.* August 20, 2007 (Chairman). (National Science Foundation Graduate Research Fellowship recipient.) Professor (with tenure), Department of Mechanical and Industrial Engineering, University of Toronto, Toronto, Ontario, Canada.

[14] Zeynep Sargut, *Efficient Approaches to Integrated Requirements Planning Problems in Supply Chain Optimization.* July 17, 2006 (Chairman). Operations Research Scientist, Amazon, Seattle, Washington.

[15] Ghina M. Yamout, *Applications of Single Party and Multiple Party Decision Making Under Risk and Uncertainty to Water Resources Allocation Problems.* August 22, 2005 (Co-Chairman with Kirk Hatfield). Owner, Ghina Yamout Consulting LLC, Water Resources Specialist, Phoenix, Arizona.

[16] Arvind Kumar, *Novel Models for Intensity Modulated Radiation Therapy Treatment Planning.* July 8, 2005 (Co-Chairman with Ravindra K. Ahuja). Managing Director of India Operations, Optym, Bangalore, India.

[17] Jie Cao, *Stochastic Inventory Control in Dynamic Environments.* June 24, 2005 (Chairman). Senior Analyst, Microsoft, Seattle, Washington.

[18] Wei Huang, *Optimization Models for Sourcing Decisions in Supply Chain Management.* July 19, 2004 (Chairman). Vice President of System Architecture, Optym, Gainesville, Florida.

[19] Sombat Sindhuchao, *An Integrated Inventory-Transportation System for Multi-item Joint Replenishment with Limited Vehicle Capacity.* March 8, 2004 (Co-Chairman with Rein Boondiskulchok). Lecturer, Department of Industrial Engineering, Ubonratchathani University, Ubonratchathani, Thailand.

[20] Sandra Duni Ekşioğlu, *Optimizing Integrated Production, Inventory and Transportation Problems in Supply Chains.* August 26, 2002 (Co-Chairman with Panos M. Pardalos). John M. and Marie G. Hefley Professor in Logistics and Entrepreneurship, Department of Industrial Engineering, University of Arkansas, Fayetteville, Arkansas.

[21] Joongkyu Choi, *Stochastic Production and Inventory Problems with Limited Resources.* February 5, 2001 (Co-Chairman with Sherman X. Bai). Chief Statistical Officer, Sequoya Group, Sarasota, Florida.

[22] Paveena Chaovalitwongse, *Integrating Transportation and Inventory Decisions in a Multi-Warehouse Multi-Retailer System with Stochastic Demand.* November 14, 2000 (Co-advisor and committee member; chairs: Panos M. Pardalos and Boghos Sivazlian). Associate Professor, Department of Industrial Engineering, Chulalongkorn University, Bangkok, Thailand.

[23] Dolores Romero Morales, *Optimization Problems in Supply Chain Management.* October 12, 2000 (Co-Chairman with Jo A.E.E. van Nunen). Professor, Department of Economics, Copenhagen Business School, Copenhagen, Denmark.

[24] Daniel J. Reaume, *Efficient Random Algorithms for Constrained Global and Convex Optimization.* April 16, 1997 (Co-Chairman with Robert L. Smith). Vice President of Commercial Data and Analytics, Honeywell.

[25] Yuli Chou, *Accelerating the Solution of Dynamic Programs through State Aggregation.* April 21, 1995 (Co-Chairman with Robert L. Smith). Vice President Business Solutions and Information Technology, Globe Union Industrial Corp., Taichung, Taiwan.

Ph.D. students (committee membership)

[1] *Georgia Institute of Technology*: Filipe Cabral, Xin Wei.

[2] *Polytechnique Montréal*, Canada: Mehdi Mahnam.

[3] *Erasmus University Rotterdam*: Sebastiaan Breedveld, Wilco van den Heuvel, Rutger Kerkkamp.

[4] *University of Michigan*: Ahmad Almuhtady (MES), Wilmer Henao, Marcial Lapp, Alexander W. Min (EECS), Hoda Parvin, Jingchen Wu.

[5] *Royal Institute of Technology (KTH)*, Stockholm, Sweden: Opponent, dissertation defense. Fredrik Carlsson (April 25, 2008).

[6] *University of Florida*: Ismail S. Bakal, Sergey I. Butenko, Gang Chen, Burak Ekşioğlu, Hulya Emir, Alex Grasas, Nihat Kasap, Pavlo A. Krokhmal, Yasemin Merzifonluoğlu, Carlos Oliveira, Eduardo L.J. Pasiliao, Onur Şeref, Kevin M. Taaffe, Michael Y. Zabarankin, Lezhou Zhan.

[7] *Agricultural University Wageningen*, The Netherlands: Eligius M.T. Hendrix.

[8] *Technical University Delft*, The Netherlands: Michiel A. Odijk.

Other advisement activities

- *Postdoctoral fellows*
  - Mehdi Mahnam (July 2018-January 2019); Polytechnique Montréal, Canada.
  - Wilco van den Heuvel (January-August 2007); Econometric Institute, Erasmus University Rotterdam, The Netherlands.

- *Visiting scholars*
  - Tobias Seidel (January-July 2016); University of Kaiserslautern, Germany.
  - Robert Rooderkerk (September 2001-May 2002); Econometric Institute, Erasmus University Rotterdam, The Netherlands.

- *Visiting Master's students*
  Eexchange students from the Royal Institute of Technology (KTH), Stockholm, Sweden:
  - Daniel Glaser (September-December 2004)
  - Erik Lögdberg (September-December 2003)
  - Johan Wallgren (September-December 2002)
  - Caroline Viberg (September-December 2001)
  - Helena Pott (September-December 2001)
  - Erik Bogentoft (June-October 2000)

- *Other*
  External mentor:
  - Amirhossein Moosavi, Michigan Data Science Fellow, University of Michigan, Ann Arbor, Michigan.

Teaching

- *Monte Carlo Methods* (book used: G.S. Fishman, "A First Course in Monte Carlo"). Graduate level course, H. Milton Stewart School of Industrial and Systems Engineering, Georgia Institute of Technology.

- *Inventory Management and Control.* Graduate level course, Department of Industrial and Operations Engineering, University of Michigan.

- *Supply Chain Management.* Graduate level course, Department of Industrial and Operations Engineering, University of Michigan.

- *Function Space Methods in System Theory* (book used: D.G. Luenberger, "Optimization by Vector Space Methods"). Graduate level course, Department of Industrial and Operations Engineering, University of Michigan.

- *Optimization Methods in Finance* (book used: G. Cornuejols and R. Tütüncü, "Optimization Methods in Finance"). Graduate level course, Department of Industrial and Operations Engineering, University of Michigan.

- *Stochastic Processes* (book used: Ross, "Stochastic Processes"). Graduate level course, Department of Industrial and Operations Engineering, University of Michigan.

- *Fundamentals of Mathematical Programming* (book used: Bazaraa, Sherali, and Shetty, "Nonlinear Programming"). Ph.D. level course, Department of Industrial and Systems Engineering, University of Florida.

- *Stochastic Modeling and Analysis* (book used: Ross, "Stochastic Processes"). Ph.D. level course, Department of Industrial and Systems Engineering, University of Florida.

- *Applied Probability Methods in Engineering* (book used: Montgomery and Runger, "Applied Statistics and Probability for Engineers"). Master's level course, Outreach Engineering Management (OEM) program, Department of Industrial and Systems Engineering, University of Florida.

- *Applied Probability Methods in Engineering* (book used: Montgomery and Runger, "Applied Statistics and Probability for Engineers"). Master's level course, Department of Industrial and Systems Engineering, University of Florida.

- *Operations Research 1* (book used: Winston and Venkataramanan, "Introduction to Mathematical Programming"). Undergraduate level course, Department of Industrial and Systems Engineering, University of Florida.

- *Operations Research 2* (book used: Winston, "Introduction to Probability Models"). Undergraduate level course, Department of Industrial and Systems Engineering, University of Florida.

- *Dynamic Programming* (book used: Denardo, "Dynamic Programming – models and applications"). Ph.D. level half-course, Department of Industrial and Systems Engineering, University of Florida.

- *Decision Support Systems for Industrial and Systems Engineers* (books used: Balter, "Mastering Microsoft Access 2000"; Albright, "VBA for Modelers"). Master's and undergraduate level course, Department of Industrial and Systems Engineering, University of Florida.

- *Information Technology for Engineers and Scientists* (books used: Balter, "Mastering Microsoft Access 2000"; Oliver, "HTML in 24 hours"). Master's and undergraduate level course, Department of Industrial and Systems Engineering, University of Florida.

- *Introduction to Management Science* (book used: Eppen, Gould, Schmidt, Moore, and Weatherford, "Introductory Management Science"). Undergraduate level course, Rotterdam School of Management, Erasmus University Rotterdam, The Netherlands.

- *Decision Systems for Logistics Management* (books used: Anderson, "The Management of Manufacturing"; Silver, Pyke, and Peterson, "Inventory Management and Production Planning and Scheduling"). Master's level course, Rotterdam School of Management, Erasmus University Rotterdam, The Netherlands.

- *Modern Quantitative Techniques in Logistics Planning* (book used: Bramel and Simchi-Levi, "The Logic of Logistics"). Ph.D. level course, Tinbergen Institute, Erasmus University Rotterdam, The Netherlands.

Research funding

- National Science Foundation, "Collaborative Research: Mitigating the cost of anarchy in complex supply chain systems" (PI, with Joseph Geunes, PI, University of Florida), US\$ 251,589 (UM share; total US\$ 424,000), 8/2009-7/2013. (Mark S. Daskin was acting PI starting September 2012.)

- National Science Foundation, "Intensity Modulated Radiation Therapy: integrated models and algorithms" (PI, with co-PI James F. Dempsey), US\$ 249,816, 7/2005-6/2010. CIEG Supplement, US\$ 15,000 (direct costs).

- University of Florida Proton Therapy Institute (UFPTI) at Shands Jacksonville, "Optimization of patient scheduling for multi-room proton therapy facility" (PI), US\$ 69,203, 5/2008-6/2009.

- National Science Foundation, "Solving tactical logistics planning problems under uncertainty" (PI, with co-PI Joseph Geunes), US\$ 245,984, 5/2004-4/2008.

- Florida Department of Health, "Optimization of proton therapy treatment planning" (co-PI, with PI James F. Dempsey), US\$ 429,275, 8/2004-6/2007.

- Varian Medical Systems, "Efficient global fluence map optimization" (co-PI, with PI James F. Dempsey), US\$ 143,532, 12/2004-11/2005.

- Motorola, "A simulation tool for improving operations planning at Motorola GTSS" (co-PI, with PI Joseph Geunes), US\$ 44,000, 2003.

- Motorola, "Motorola Global Telecommunications Solutions Sector inventory optimization" (co-PI, with PI Joseph Geunes and co-PI Elif Akçalı), US\$ 35,000, 2002-2003.

Publications in refereed journals

[1] G. Lan, H.E. Romeijn, and Z. Zhou. Conditional Gradient Methods for Convex Optimization with General Affine and Nonlinear Constraints. *SIAM Journal on Optimization* 31:3 (2021), 2307-2339.

[2] Z. Strinka and H.E. Romeijn. Approximation algorithms for selection problems in supply chain optimization. *Operations Research* 66:3 (2018), 834-848.

[3] I. Lee, M.A. Epelman, H.E. Romeijn, and R.L. Smith. Simplex algorithm for countable-state discounted Markov Decision Processes. *Operations Research* 65:4 (2017), 1029-1042.

[4] M. Al-Gwaiz, X. Chao, and H.E. Romeijn. Capacity expansion and cost efficiency improvement in the warehouse problem. *Naval Research Logistics* 63 (2016), 367-373.

[5] V.W. Wu, M.A. Epelman, H. Wang, H.E. Romeijn, M. Feng, Y. Cao, R. Ten Haken, and M. Matuszak. Optimizing global liver function in radiation therapy treatment planning. *Physics in Medicine and Biology* 61:17 (2016).

[6] J. Geunes, H.E. Romeijn, and W. van den Heuvel. Improving the efficiency of decentralized supply chains with fixed ordering costs. *European Journal of Operational Research* 252:3 (2016), 815-828.

[7] M. Önal, H.E. Romeijn, A. Sapra, and W. van den Heuvel. The economic lot-sizing problem with perishable items and consumption order preference. *Naval Research Logistics* 244:3 (2015), 881-891.

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[14] H.E. Romeijn, J.F. Dempsey, and J.G. Li. On the equivalence of multi-criteria fluence map Optimization problems. In: B.Y. Yi, S.D. Ahn, E.K. Choi, and S.W. Ha, editors, *Proceedings of the 14th International Conference on the Use of Computers in Radiation Therapy (ICCR)*, Seoul, South Korea (2004), 714-717.

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[16] H.E. Romeijn, R.K. Ahuja, J.F. Dempsey, and A. Kumar. A rigorous approach to aperture modulation in IMRT treatment planning. In: B.Y. Yi, S.D. Ahn, E.K. Choi, and S.W. Ha, editors, *Proceedings of the 14th International Conference on the Use of Computers in Radiation Therapy (ICCR)*, Seoul, South Korea (2004), 169-173.

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Books

[1] P.M. Pardalos and H.E. Romeijn (editors). *Handbook of Optimization in Medicine* (2009), Springer, New York, New York.

[2] J. Geunes, E. Akçalı, P.M. Pardalos, H.E. Romeijn, and Z.J. Shen (editors). *Applications of Supply Chain Management and e-Commerce Research* (2005), Springer, New York, New York.

[3] P.M. Pardalos and H.E. Romeijn (editors). *Handbook of Global Optimization volume 2* (2002), Kluwer Academic Publishers, Dordrecht, The Netherlands.

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Published abstracts

[1] V. Wu, M. Epelman, E. Romeijn, M. Feng, Y. Cao, H. Wang, R. Ten Haken, and M. Matuszak. Optimizing Global Liver Function in Liver SBRT Treatment Planning. *Medical Physics* 42:6, 3705-3706. Poster presentation (V. Wu) at the American Association for Physicists in Medicine (AAPM) annual meeting, Anaheim, California, July 2015.

[2] V. Wu, M. Epelman, M. Feng, Y. Cao, H. Wang, E. Romeijn, and M. Matuszak. Incorporating Liver Functionality in Radiation Therapy Treatment Planning. *Medical Physics* 41:6, 543. Oral presentation (V. Wu) at the American Association for Physicists in Medicine (AAPM) annual meeting, Austin, Texas, August 2014.

[3] D. Nguyen, P. Dong, T. Long, D. Ruan, D.A. Low, E. Romeijn, and K. Sheng. Integral dose investigation of non-coplanar treatment beam geometries in radiotherapy. *Medical Physics* 41:6, 011905. American Association for Physicists in Medicine (AAPM) annual meeting, Austin, Texas, August 2014.

[4] M. Zarepisheh, T. Long, N. Li, E. Romeijn, X. Jia, and S. Jiang. A novel prior-knowledge-based optimization algorithm for automatic treatment planning and adaptive radiotherapy re-planning. *Medical Physics* 40:6, 530. Oral presentation (M. Zarepisheh) at the American Association for Physicists in Medicine (AAPM) annual meeting, Indianapolis, Indiana, August 2013.

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[6] T. Long, M. Matuszak, M. Schipper, M. Epelman, F. Kong, R. Ten Haken, and E. Romeijn. A stochastic optimization approach to adaptive lung radiation therapy treatment planning. *Medical Physics* 40:6, 388. Oral presentation (T. Long) at the American Association for Physicists in Medicine (AAPM) annual meeting, Indianapolis, Indiana, August 2013.

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[8] K. Sheng, E. Romeijn, P. Dong, T. Long, D. Low, and D. Ruan. A Framework for 4pi Radiotherapy. *Medical Physics* 39:6, 3610. American Association for Physicists in Medicine (AAPM) annual meeting, Charlotte, North Carolina, August 2012.

[9] T.C. Long, B. Fraass, M. Matuszak, H.E. Romeijn. Sensitivity analysis for lexicographic ordering in radiation therapy treatment planning. *Medical Physics* 38:6, 3701. Oral presentation (T. Long) at the American Association for Physicists in Medicine (AAPM) annual meeting, Vancouver, B.C., Canada, July/August 2011. Finalist, John R. Cameron - John R. Cunningham Young Investigator Competition.

[10] C. Men, H.E. Romeijn, X. Jia, X. Gu, and S. Jiang. GPU-based ultra fast Direct Aperture Optimization in IMRT treatment planning. *Medical Physics* 37:6, 3414. Oral presentation (C. Men) at the American Association for Physicists in Medicine (AAPM) annual meeting, Philadelphia, Pennsylvania, July 2010.

[11] E. Salari, H.E. Romeijn, C. Men. Incorporating the tongue-and-groove effect in Direct Aperture Optimization. *Medical Physics* 37:6, 3216. Poster presentation (E. Salari) at the American Association for Physicists in Medicine (AAPM) annual meeting, Philadelphia, Pennsylvania, July 2010.

[12] C. Men, H.E. Romeijn, X. Jia, X. Gu, Y. Liang, and S. Jiang. A novel aperture-based algorithm for fast treatment plan optimization of Volumetric Modulated Arc Therapy (VMAT). *Medical Physics* 37:6, 3209. Oral presentation (C. Men) at the American Association for Physicists in Medicine (AAPM) annual meeting, Philadelphia, Pennsylvania, July 2010.

[13] E. Salari and H.E. Romeijn, Trade-off between treatment plan quality and beam-on-time in IMRT using Direct Aperture Optimization. *Medical Physics* 37:6, 3095. Moderated poster discussion (E. Salari) at the American Association for Physicists in Medicine (AAPM) annual meeting, Philadelphia, Pennsylvania, July 2010.

[14] E. Salari, C. Men, Z. Li, N.P. Mendenhall, J.R. Palta, and H.E. Romeijn. A new patient scheduling approach for proton therapy treatment delivery. *Medical Physics* 36:6, 2630. Poster presentation (E. Salari) at the American Association for Physicists in Medicine (AAPM) annual meeting, Anaheim, California, July 2009.

[15] C. Men, E. Salari, Z. Li, N.P. Mendenhall, J.R. Palta, and H.E. Romeijn. Optimization models for strategic patient scheduling problems in proton therapy delivery. *Medical Physics* 36:6, 2630. Poster presentation (C. Men) at the American Association for Physicists in Medicine (AAPM) annual meeting, Anaheim, California, July 2009.

[16] C. Men, H.E. Romeijn, Z.C. Taşkın, and J.F. Dempsey. Direct aperture optimization in IMRT treatment planning. *Medical Physics* 34:6, 2254. Poster presentation (C. Men) at the American Association for Physicists in Medicine (AAPM) annual meeting, Minneapolis, Minnesota, July 2007.

[17] C. Fox, D. Aleman, H.E. Romeijn, J.G. Li, and J.F. Dempsey. Gamma-ray Intensity Modulated Radiation Therapy. *International Journal of Radiation Oncology Biology Physics* 66:3 (Suppl.), S673. Oral presentation (C. Fox) at the American Society for Therapeutic Radiology and Oncology (ASTRO) annual meeting, Philadelphia, Pennsylvania, November 2006.

[18] J.F. Dempsey, B. Dionne, J. Fitzsimmons, A. Haghigat, J.G. Li, D. Low, S. Mutic, J.R. Palta, H.E. Romeijn, and G. Sjoden. A real-time MRI guided external radiotherapy delivery system. *Medical Physics* 33:6, 2254. Oral presentation (J.F. Dempsey) at the American Association for Physicists in Medicine (AAPM) annual meeting, Orlando, Florida, July 2006.

[19] D.M. Aleman, H.E. Romeijn, and J.F. Dempsey. A response surface-based approach to beam orientation optimization in IMRT. *Medical Physics* 33:6, 2206. Moderated poster presentation (D.M. Aleman) at the American Association for Physicists in Medicine (AAPM) annual meeting, Orlando, Florida, July 2006.

[20] D.M. Aleman, H.E. Romeijn, and J.F. Dempsey. A novel neighborhood for local search and simulated annealing methods in beam orientation optimization in IMRT. *Medical Physics* 33:6, 2192. Poster presentation (D.M. Aleman) at the American Association for Physicists in Medicine (AAPM) annual meeting, Orlando, July 2006.

[21] H. Li, C. Fox, H.E. Romeijn, and J.F. Dempsey. Implementation and comparison of several proton IMRT algorithms. *Medical Physics* 33:6, 2192. Oral presentation (H. Li) at the American Association for Physicists in Medicine (AAPM) annual meeting, Orlando, Florida, July 2006.

[22] C. Fox, B. Lynch, D.M. Aleman, H. Li, H.E. Romeijn, and J.F. Dempsey. A scientific comparison of inverse treatment plan quality using a convex non-linear programming model as a function of beam quality and beam number. *Medical Physics* 33:6, 2192. Oral presentation (C. Fox) at the American Association for Physicists in Medicine (AAPM) annual meeting, Orlando, Florida, July 2006.

[23] C. Fox, H. Li, H.E. Romeijn, and J.F. Dempsey. Fast efficient global fluence map optimization using a parallelized objective function for IMRT treatment planning. *Medical Physics* 33:6, 2103. Poster presentation (C. Fox) at the American Association for Physicists in Medicine (AAPM) annual meeting, Orlando, Florida, July 2006.

[24] H. Li, C. Fox, H.E. Romeijn, and J.F. Dempsey. 3D Intensity Modulated Proton Therapy with minimal beam number. *Medical Physics* 33:6, 2051. Poster presentation (H. Li) at the American Association for Physicists in Medicine (AAPM) annual meeting, Orlando, Florida, July 2006.

[25] J.F. Dempsey, D. Benoit, J.R. Fitzsimmons, A. Haghighat, J.G. Li, D.A. Low, S. Mutic, J.R. Palta, H.E. Romeijn, and G.E. Sjoden. A Device for realtime 3D image-guided IMRT. *International Journal of Radiation Oncology Biology Physics* 63:2 (Suppl.), S202. Oral presentation (J.F. Dempsey) at the American Society for Therapeutic Radiology and Oncology (ASTRO) annual meeting, Denver, Colorado, October 2005.

[26] H.E. Romeijn and J.F. Dempsey. On the relationship between risk management and IMRT treatment plan optimization. *Medical Physics* 32:6, 1976. Poster presentation (H.E. Romeijn)

at the American Association for Physicists in Medicine (AAPM) annual meeting, Seattle, Washington, July 2005.

[27] K. Cheong, T. Suh, H.E. Romeijn, J.G. Li, and J.F. Dempsey. Fast nonlinear optimization with simple bounds for IMRT planning. *Medical Physics* 32:6, 1975. Poster presentation (K. Cheong) at the American Association for Physicists in Medicine (AAPM) annual meeting, Seattle, Washington, July 2005.

[28] J.F. Dempsey, H.E. Romeijn, J.G. Li. The equivalence of "biological" and "physical" fluence map optimization models for IMRT. *International Journal of Radiation Oncology Biology Physics* 60:1 (Suppl.), S628. Oral presentation (J.F. Dempsey) at the American Society for Therapeutic Radiology and Oncology (ASTRO) annual meeting, Atlanta, Georgia, October 2004.

[29] J.F. Dempsey, H.E. Romeijn, J.G. Li, D.A. Low, and J.R. Palta. Analysis of errors due to limited dose-grid resolution in fluence map optimization for IMRT. *Medical Physics* 31:6, 1863. Poster presentation (J.F. Dempsey) at the American Association for Physicists in Medicine (AAPM) annual meeting, Pittsburgh, Pennsylvania, July 2004.

[30] H.E. Romeijn, J.F. Dempsey, and J.G. Li. On the equivalence of multi-criteria fluence map optimization problems. *Medical Physics* 31:6, 1777. Oral presentation (H.E. Romeijn) at the American Association for Physicists in Medicine (AAPM) annual meeting, Pittsburgh, July 2004.

[31] J.F. Dempsey, H.E. Romeijn, and E. Lögdberg. Fast global solutions to fluence map optimization problems for adaptive radiotherapy. *Medical Physics* 31:6, 1777. Oral presentation (J.F. Dempsey) at the American Association for Physicists in Medicine (AAPM) annual meeting, Pittsburgh, Pennsylvania, July 2004.

[32] H.E. Romeijn, R.K. Ahuja, J.F. Dempsey, and A. Kumar. An exact approach to aperture modulation in IMRT treatment planning. *Medical Physics* 31:6, 1776. Oral presentation (H.E. Romeijn) at the American Association for Physicists in Medicine (AAPM) annual meeting, Pittsburgh, Pennsylvania, July 2004.

[33] D.M. Aleman, H.E. Romeijn, and J.F. Dempsey. A response surface based approach for integrating beam orientation optimization with fluence map optimization in IMRT. *Medical Physics* 31:6, 1776. Oral presentation (D.M. Aleman) at the American Association for Physicists in Medicine (AAPM) annual meeting, Pittsburgh, Pennsylvania, July 2004.

[34] J.F. Dempsey, H.E. Romeijn, R.K. Ahuja, A. Kumar, and J.G. Li. A novel linear programming approach to fluence map optimization for intensity modulated radiation therapy treatment planning. *Radiotherapy & Oncology* 68:Suppl. 1 (2003), S68-S69. Oral presentation (J.F. Dempsey) at the ESTRO Meeting on Physics and Radiation Technology, Geneva, Switzerland, September 2003.

[35] J.F. Dempsey, R.K. Ahuja, S. Kamath, A. Kumar, J.G. Li, J.R. Palta, H.E. Romeijn, S. Ranka, and S. Sahni. The leaf sequencer: an underestimated problem? *Radiotherapy & Oncology* 68:Suppl. 1 (2003), S3. Oral presentation (J.F. Dempsey) at the ESTRO Workshop "Optimisation of IMRT", Geneva, Switzerland, September 2003.

[36] J.F. Dempsey, A. Kumar, R.K. Ahuja, J.G. Li, and H.E. Romeijn. An automated linear programming based treatment planning system for head-and-neck IMRT. *Medical Physics* 30:6, 1491. Poster presentation (J.F. Dempsey) at the American Association for Physicists in Medicine (AAPM) annual meeting, San Diego, California, August 2003.

[37] A. Kumar, R.K. Ahuja, H.E. Romeijn, J.G. Li, and J.F. Dempsey. A linear programming based approach for integrating coplanar equi-spaced beam orientation optimization with fluence map optimization in IMRT. *Medical Physics* 30:6, 1341. Moderated poster presentation (A. Kumar) at the American Association for Physicists in Medicine (AAPM) annual meeting, San Diego, California, August 2003.

[38] H.E. Romeijn, R.K. Ahuja, J.F. Dempsey, A. Kumar, and J.G. Li. A novel linear programming model for fluence map optimization in IMRT treatment planning. *Medical Physics* 30:6, 1334. Moderated poster presentation (H.E. Romeijn) at the American Association for Physicists in Medicine (AAPM) annual meeting, San Diego, California, August 2003.

Technical reports

[1] M. Mahnam, H.E. Romeijn, and M. Gendreau. A multi-objective column generation approach for Pareto front approximation in direct aperture optimization. Submitted for publication to *INFORMS Journal on Computing*.

[2] Y. Cheng, G. Lan, and H.E. Romeijn. Functional constrained optimization for risk aversion and sparsity control. Submitted for publication to *Operations Research*.

[3] X. Liu, C. Alexopoulos, and H.E. Romeijn. Multi-period data-driven newsvendor problem: a deep reinforcement learning solution approach with theoretical convergence guarantees. Submitted for publication to *Operations Research*.

Keynotes, plenaries, and other major seminars and conference presentations

[1] "Quantifying the Trade-off between Radiation Therapy Treatment Plan Quality and Delivery Efficiency", Conference on "Econometrics and Beyond" (celebrating the 60th birthday of the Econometric Institute), Erasmus University Rotterdam, Rotterdam, The Netherlands (May 27, 2016).

[2] "A column generation based algorithm for Volumetric Modulated Arc Therapy treatment plan optimization", IE Distinguished Leaders Seminar Series, Department of Industrial Engineering, Clemson University, Clemson, South Carolina (October 9, 2015).

[3] "Radiation therapy treatment plan optimization" (Plenary talk), Modeling OPtimization Conference: Theory and Applications (MOPTA), Lehigh University, Bethlehem, Pennsylvania (August 18-20, 2010).

[4] "Optimization problems for radiation therapy treatment planning" (Plenary talk), Nordic Optimization Symposium, Stockholm, Sweden (March 13-14, 2009).

[5] "Optimal multileaf collimator leaf sequencing in IMRT treatment planning" (Keynote talk), Operations Research in Radiation Oncology Workshop, Deakin University, Melbourne, Australia (February 16-18, 2009).

[6] "Optimization of radiation therapy treatment plans" (Plenary talk), Conference on Operations Research & Health Care, Erasmus University Rotterdam, The Netherlands (November 18, 2008).

[7] "Radiation therapy treatment planning: current approaches and future directions", San-Ei Gen Seminar, Management School and Economics, University of Edinburgh, U.K. (May 17, 2007).

Other seminars and invited conference presentations

[1] "A column-generation approach to bi-criteria radiation therapy treatment plan optimization", L'École des Mines de Saint-Étienne, Campus Aix-Marseille-Provence, Gardanne, France (March 19, 2025).

[2] "Approximation algorithms for a class of stochastic selection problems with reward and cost considerations", Department of Industrial and Systems Engineering, University of Florida, Gainesville, Florida (April 8, 2022).

[3] "Approximation algorithms for a class of stochastic selection problems with reward and cost considerations", Wm Michael Barnes '64 Department of Industrial and Systems Engineering, Texas A&M University, College Station, Texas (February 25, 2022).

[4] "Approximation algorithms for a class of stochastic selection problems with reward and cost considerations", Department of Industrial & Systems Engineering, University of Washington, Seattle, Washington (May 8, 2018).

[5] "A column generation based approach to treatment plan optimization for Volumetric Modulated Arc Therapy", Shanghai University of Finance and Economics, Shanghai, China (June 26, 2017).

[6] "A column generation based approach to treatment plan optimization for Volumetric Modulated Arc Therapy", Department of Industrial and Manufacturing Engineering, Penn State University, State College, Pennsylvania (November 17, 2016).

[7] "Quantifying the Trade-off between IMRT Treatment Plan Quality and Delivery Efficiency using Direct Aperture Optimization", North Carolina State University, Raleigh, North Carolina (October 14, 2016).

[8] "Accounting for the tongue-and-groove effect in IMRT treatment planning using a robust direct aperture optimization approach", International Conference on Continuous Optimization, Tokyo, Japan (August 10, 2016).

[9] "Approximation algorithms for a class of stochastic selection problems with reward and cost considerations", School of Computing, Informatics, and Decision Systems Engineering, Arizona State University, Tempe, Arizona (March 25, 2016).

[10] "Quantifying the Trade-off between IMRT Treatment Plan Quality and Delivery Efficiency", EURO Glasgow, Scotland (July 15, 2015).

[11] "Quantifying the Trade-off between IMRT Treatment Plan Quality and Delivery Efficiency using Direct Aperture Optimization", University at Buffalo, Buffalo, New York (April 17, 2015).

[12] "Quantifying the Trade-off between IMRT Treatment Plan Quality and Delivery Efficiency using Direct Aperture Optimization", Polytechnique Montréal, Montréal, Canada (April 9, 2015).

[13] "A constructive heuristic for non-coplanar VMAT radiation therapy treatment planning", Modeling OPtimization Conference: Theory and Applications (MOPTA), Lehigh University, Bethlehem, Pennsylvania (August 13, 2014).

[14] "A constructive heuristic for non-coplanar VMAT radiation therapy treatment planning", SIAM Conference on Optimization, San Diego, California (May 20, 2014).

[15] "A column generation based algorithm for Volumetric Modulated Arc Therapy treatment plan optimization", Department of Industrial Engineering, University of Arkansas, Fayetteville, Arkansas (February 5, 2014).

[16] "Constructing risk-reward tradeoff curves for stochastic selection problems", EURO-INFORMS Joint International Meeting, Rome, Italy (July 2, 2013).

[17] "Beam orientation optimization in radiation therapy treatment planning", INFORMS Computing Society Conference, Santa Fe, New Mexico (January 7, 2013).

[18] "Approximation algorithms for selective newsvendor problems", ECCO Conference, Antalya, Turkey (April 26-28, 2012).

[19] "A column generation based heuristic for Volumetric Modulated Arc Therapy (VMAT) treatment plan optimization", School of Industrial Engineering, Purdue University, West Lafayette, Indiana (March 28, 2012).

[20] "Sparse treatment plan optimization", Winter Institute of Medical Physics, Breckenridge, Colorado (February 26-29, 2012).

[21] "Approximation algorithms for selective newsvendor problems", INFORMS Optimization Society Conference, Coral Gables, Florida (February 24-26, 2012).

[22] "A column generation based heuristic for Volumetric Modulated Arc Therapy (VMAT) treatment plan optimization", Department of Mechanical and Industrial Engineering, University of Toronto, Toronto, Ontario, Canada (January 27, 2012).

[23] "Direct aperture optimization in IMRT treatment planning", Department of Radiation Oncology, Erasmus Medical Centre, Rotterdam, The Netherlands (July 7, 2011).

[24] "Quantifying the trade-off between IMRT treatment plan quality and delivery efficiency using direct aperture optimization", The 21st International Conference on Multiple Criteria Decision Making, Jyväskylä, Finland (June 14, 2011).

[25] "Optimal multileaf collimator leaf sequencing in IMRT treatment planning", Department of Industrial Engineering and Management Sciences, Northwestern University, Evanston, Illinois (May 3, 2011).

[26] "Aperture-based optimization in radiation therapy treatment planning", Decisions, Operations & Technology Management, Anderson School of Management, UCLA, Los Angeles, California (April 15, 2011).

[27] "Direct Aperture Optimization: an exact approach", Department of Radiation Oncology, UCLA, Los Angeles, California (April 14, 2011).

[28] "Aperture-based optimization in radiation therapy treatment planning", Department of Industrial and Systems Engineering, University of Southern California, Los Angeles, California (April 7, 2011).

[29] "Optimization models for radiation therapy treatment planning", Department of Medical Physics & Applied Radiation Sciences, McMaster University, Hamilton, Ontario (February 11, 2011).

[30] "Direct aperture optimization: an exact approach", Department of Computing and Software, McMaster University, Hamilton, Ontario (February 10, 2011).

[31] "Quantifying the trade-off between IMRT treatment plan quality and delivery efficiency using direct aperture optimization", Department of Industrial Engineering, University of Arkansas, Fayetteville, Arkansas (January 21, 2011).

[32] "Radiation therapy treatment plan optimization", Department of Industrial Engineering, Texas A&M University, College Station, Texas (October 25, 2010).

[33] "Economic lot-sizing with perishable inventories", International Workshop on Lot Sizing (IWLS 2010), Gardanne, France (August 25-27, 2010).

[34] "Supply chain planning problems with market choice", Industrial & Systems Engineering Program, University of Minnesota, Minneapolis, Minnesota (May 5, 2010).

[35] "Direct aperture optimization: an exact approach", Department of Electrical Engineering and Computer Science, University of Michigan, Ann Arbor, Michigan (April 9, 2009).

[36] "Direct aperture optimization", Department of Radiation Oncology, University of Michigan, Ann Arbor, Michigan (February 26, 2010).

[37] "Image-guided radiation therapy treatment planning", Workshop on Mathematical Problems, Models and Methods in Biomedical Imaging, Institute for Pure and Applied Mathematics (IPAM), UCLA, Los Angeles, California (February 8-12, 2010).

[38] "Economic lot-sizing with perishable inventories", Workshop on Managing the supply chain in an economic downturn, University of Sydney, Sydney, Australia (November 4-5, 2009).

[39] "Supply chain planning problems with market choice", Faculty of Science and Information Technology, School of Mathematical and Physical Sciences, The University of Newcastle, Newcastle, Australia (November 3, 2009).

[40] "Quantifying the trade-off between beam-on-time and treatment plan quality", Workshop on New Directions in Multicriteria Planning for Radiation Therapy, Massachusetts General Hospital (MGH), Boston, Massachusetts (October 23, 2009).

[41] "Direct aperture optimization: an exact approach", Department of Radiation Oncology, University of California at San Diego, La Jolla, California (October 15, 2009).

[42] "Economic lot-sizing with perishable inventories", 20th International Symposium on Mathematical Programming (ISMP), Chicago, Illinois (August 24-28, 2009).

[43] "Radiation therapy treatment plan optimization: models and algorithms", Department of Decision Sciences, National University of Singapore, Singapore (July 22, 2009).

[44] "Optimal multileaf collimator leaf sequencing in IMRT treatment planning", Econometric Institute, Erasmus University Rotterdam, Rotterdam, The Netherlands (June 13, 2008).

[45] "Supply chain planning problems with market choice", Koç University, Istanbul, Turkey (June 6, 2008).

[46] "Optimal multileaf collimator leaf sequencing in IMRT treatment planning", SIAM Optimization, Boston, Massachusetts (May 11, 2008).

[47] "Supply chain planning problems with market choice", Division of Optimization and Systems Theory, Department of Mathematics, Royal Institute of Technology (KTH), Stockholm, Sweden (April 23, 2008).

[48] "Supply chain planning problems with market choice", Department of Industrial Engineering, Mississippi State University, Mississippi State, Mississippi (February 8, 2008).

[49] "Towards a cyberinfrastructure for online adaptive radiotherapy", NSF CMII Grantees' Conference, Knoxville, Tennessee (January 8, 2008).

[50] "Operations Research in medicine", RECNET annual meeting, TNO, The Hague, The Netherlands (October 19, 2007).

[51] "Supply chain planning problems with market choice", Department of Industrial Engineering and Management Sciences, Northwestern University, Evanston, Illinois (October 2, 2007).

[52] "Optimal multileaf collimator leaf sequencing in IMRT treatment planning", Operating On Health Care: An Operations Research Symposium, Vancouver, B.C., Canada (August 16, 2007).

[53] "Radiation therapy treatment plan optimization", Division of Optimization and Systems Theory, Department of Mathematics, Royal Institute of Technology (KTH), Stockholm, Sweden (June 19, 2007).

[54] "Supply chain planning problems with market choice", Department of Industrial and Operations Engineering, University of Michigan, Ann Arbor, Michigan (May 24, 2007).

[55] "Supply chain planning problems with market choice", Management School and Economics, Management Science and Business Economics seminar, University of Edinburgh, U.K. (May 15, 2007).

[56] "Supply chain planning problems with market choice", Sloan School of Management, Massachusetts Institute of Technology, Cambridge, Massachusetts (April 23, 2007)

[57] "A direct aperture optimization approach to IMRT treatment planning", Massachusetts General Hospital, Department of Radiation Oncolology, Harvard University, Boston, Massachusetts (March 6, 2007).

[58] "Radiation therapy treatment plan optimization", Department of Industrial and Operations Engineering, University of Michigan, Ann Arbor, Michigan (January 17, 2007).

[59] "Capacitated procurement planning with price-sensitive demand and concave revenue functions", Econometric Institute, Erasmus University Rotterdam, Rotterdam, The Netherlands (December 7, 2006).

[60] "Radiation therapy treatment plan optimization: models and algorithms", Edward P. Fitts Department of Industrial and Systems Engineering, North Carolina State University, Raleigh, North Carolina (November 17, 2006).

[61] "Radiation therapy treatment plan optimization: models and algorithms", Graduate School of Business, Stanford University, Stanford, California (October 19, 2006).

[62] "Radiation therapy treatment plan optimization: models and algorithms", Industrial Engineering Program, University of Washington, Seattle, Washington (October 17, 2006).

[63] "Capacitated procurement planning with price-sensitive demand and concave revenue functions", Operations and Information Technology Management Group, Haas School of Business, University of California, Berkeley, California (September 22, 2006).

[64] "The multi-facility multi-retailer newsvendor problem", INFORMS International Hong Kong (June 2006).

[65] "A risk management approach to IMRT treatment planning", INFORMS San Francisco (November 15, 2005).

[66] "Multi-facility multi-newsvendor problems", INFORMS San Francisco (November 14, 2005).

[67] "Radiation therapy treatment plan optimization: models and algorithms", Department of Industrial Engineering, University of Pittsburgh, Pittsburgh, Pennsylvania (October 13, 2005).

[68] "A column generation approach to aperture modulation in radiation therapy treatment planning", Saïd School of Business, University of Oxford, Oxford, U.K. (August 17, 2005).

[69] "From IMRT to IGIMRT optimization", IGIMRT at Sea, Alaska (August 5, 2005).

[70] "Models for radiation therapy treatment planning", IFORS Conference, Honolulu, Hawaii (July 12, 2005).

[71] "Models for radiation therapy treatment planning", INFORMS Denver (October 25, 2004).

[72] "Integrating treatment plan design and delivery for IMRT", International Conference on Continuous Optimization I, Troy, New York (August 2, 2004).

[73] "Polynomial-time algorithms for multi-level lot-sizing problems with production capacities", Workshop on ÒMathematics in the Supply ChainÓ, Oberwolfach, Germany (April 11, 2004).

[74] "A column generation approach to radiation treatment planning using aperture modulation", Systems and Industrial Engineering Department, University of Arizona, Tucson, Arizona (November 20, 2003).

[75] "A column generation approach for optimizing radiation therapy treatment plans", INFORMS Atlanta, Georgia (October 21, 2003).

[76] "Optimization for intensity modulated radiation therapy treatment planning", Tutorial, INFORMS Atlanta, Georgia (October 21, 2003).

[77] "A column generation approach to radiation treatment planning using aperture modulation", Mathematical Programming Symposium, Copenhagen, Denmark (August 20, 2003).

[78] "A customer allocation problem with subcontracting and capacity acquisition", INFORMS San Jose, California (November 19, 2002).

[79] "Assignment problems in supply chains", INFORMS Miami, Florida (November 5, 2001).

[80] "Integrating inventory and transportation under stochastic demand", INFORMS San Antonio, Texas (November 8, 2000).

[81] "Optimization of goods flows in supply chains", INFORMS San Antonio, Texas (November 5, 2000).

[82] "The multi-period single-sourcing problem", INFORMS Cincinnati, Ohio (May 4, 1999).

[83] "The multi-period single-sourcing problem", Department of Industrial and Systems Engineering, University of Florida, Gainesville, Florida (April 1999).

[84] "The multi-period single-sourcing problem", Anderson School of Management, UCLA, Los Angeles, California (February 1999).

[85] "The multi-period single-sourcing problem", Department of Mechanical and Industrial Engineering, University of Illinois, Urbana-Champaign, Illinois (February 1999).

[86] "Generating experimental data for the Generalized Assignment Problem", INFORMS Seattle, Washington (October 28, 1998).

[87] "Simulated annealing and adaptive search in global optimization", Department of Mechanical Engineering, University of Minnesota, Minneapolis, Minnesota (March 1998).

[88] "Simulated annealing and adaptive search in global optimization", Department of Industrial Engineering, SUNY Buffalo, Buffalo, New York (February 1998).

[89] "Simulated annealing and adaptive search in global optimization", Rotman School of Management, University of Toronto, Toronto, Ontario, Canada (February 1998).

[90] "Simulated annealing and adaptive search in global optimization", Department of Industrial Engineering, Texas A&M University, College Station, Texas (January 1998).

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[91] "A probabilistic analysis of the Generalized Assignment Problem", INFORMS Dallas, Washington (October 29, 1997).

[92] "Simulated Annealing for Mixed Integer/Continuous Global Optimization ", 16th International Symposium on Mathematical Programming, Lausanne, Switzerland (August 1997).

[93] "Simulated annealing and adaptive search in global optimization", Department of Automation and Production, Ecole des Mines de Nantes, Nantes, France (April 1996).

[94] "Global optimization: a survey", Department of Automation and Production, Ecole des Mines de Nantes, Nantes, France (April 1996).

[95] "Approximating shortest paths in large-scale networks with an application to Intelligent Transportation Systems", Graduate School of Business, University of Chicago, Chicago, Illinois (February 1996).

[96] "Routing trains through railway stations", INFORMS New Orleans, Louisiana (October 1995).

[97] "Parallel machine scheduling: a probabilistic analysis", Conference on Optimization '95, Braga, Portugal (July 1995).

[98] "Shadow prices in infinite dimensional linear programming", 15th International Symposium on Mathematical Programming, Ann Arbor, Michigan (August 1994).

[99] "Traffic modelling: Intelligent Vehicle/Highway Systems (IVHS)", Department of Decision and Information Sciences, Rotterdam School of Management, Erasmus University Rotterdam, Rotterdam, The Netherlands (February 1994).

[100] "Simulated annealing and adaptive search in global optimization", Dipartimento di Matematica, Università di Pisa, Pisa, Italy (December 1993).

[101] "Simulated annealing and adaptive search in global optimization", Dipartimento di Sistemi e Informatica, Università di Firenze, Florence, Italy (December 1993).

[102] "Simulated annealing and adaptive search in global optimization", TIMS/ORSA Chicago, Illinois (May 1993).

[103] "Multi-level single-linkage and simulated annealing for global optimization", TIMS/ ORSA Chicago, Illinois (May 1993).

[104] "Parallel shortest path algorithms for real time dynamic routing", TIMS/ORSA Chicago, Illinois (May 1993).

[105] "Simulated annealing and adaptive search in global optimization/Multi-Level Single Linkage and simulated annealing in global optimization", Department of Computer Science, University of Colorado, Boulder, Colorado (April 1993).

[106] "Global optimization: a survey", Instituto Superior de Estatistica e Gestão de Informação (ISEGI), Universidade Nova de Lisboa, Lisbon, Portugal (January 1993).

[107] "Adaptive search and simulated annealing in global optimization", Department of Civil Engineering and Operations Research, Princeton University, Princeton, New Jersey (November 1992).

[108] "Adaptive search and simulated annealing in global optimization", Industrial Engineering Program, University of Washington, Seattle, Washington (November 1992).

[109] "Adaptive search in global optimization", ORSA/TIMS San Francisco, California (November 1992).

[110] "Global optimization: a survey", National Institute of Public Health and Environmental Protection (RIVM), Bilthoven, The Netherlands (March 1992).

[111] "Hide-and-Seek: a simulated annealing algorithm for global optimization", TIMS/SOBRAPO Joint International Meeting, Rio de Janeiro, Brazil (July 1991).

[112] "Sampling through random walks: theory and applications", XIV Systems Engineering Conference, Santiago, Chile (July 1991).

[113] "Hide-and-seek: a simulated annealing algorithm for global optimization", TIMS/ORSA Nashville, Tennessee (May 1991).

[114] "Hide-and-Seek: a simulated annealing algorithm for global optimization", Industrial Engineering Program, University of Washington, Seattle, Washington (May 1991).

[115] "Hide-and-Seek: a simulated annealing algorithm for global optimization", Department of Mathematics, Agricultural University Wageningen, Wageningen, The Netherlands (February 1991).

[116] "Hide-and-Seek: a simulated annealing algorithm for global optimization", II. Workshop on Global Optimization, Sopron, Hungary (December 1990).

[117] "Duality in infinite-dimensional linear programming", ORSA/TIMS Philadelphia, Pennsylvania (October 1990).

[118] "Duality in infinite dimensional linear programming", Department of Mathematics and Statistics, University of Windsor, Windsor, Ontario, Canada (May 1990).

[119] "Sampling through random walks", Department of Industrial and Operations Engineering, University of Michigan, Ann Arbor, Michigan (December 1989).

[120] "Sampling through random walks", The Wharton School, University of Pennsylvania, Philadelphia, Pennsylvania (December 1989).