


Curriculum vitae

Name:	Marc Reimann	
Address:	<p>Home: Hubert-Hoffmann-Ring 29a A-8044 Graz, Austria</p> <p>Work: Institute of Production and Operations Management University of Graz Universitätsstrasse 15/E3 A-8010 Graz, Austria</p>	
Phone:	(+43) 316 380 – 3493	
Fax:	(+43) 316 380 – 9560	
E-mail:	marc.reimann@uni-graz.at	
Date of birth:	January 31, 1974	
Nationality:	Austrian	
Languages:	German (mother tongue), English (fluent), Russian (basic)	
Education:	<p>PhD January 2003 Business Administration, University of Vienna Thesis: Ant based Optimization in Goods Transportation Advisor: Prof. Dr. Richard F. Hartl</p> <p>MSc August 1998 International Business, University of Vienna Thesis: Tourenplanung: Theorie und Praxis (in German) Advisor: Prof. Dr. Richard F. Hartl</p>	
Studies abroad:	<p>July 14th, 2002 – July 27th, 2002 SFI Graduate Workshop in Computational Economics, Santa Fe, USA</p> <p>July 15th, 2001 – August 9th, 2001 SFI Complex Systems Summer School, CEU Budapest, Hungary</p>	
Academic appointments:	<p>01/2009 – Full Professor University of Graz, Institute of Production and Operations Management</p>	

	<p>09/2007 – 12/2008 Associate Professor Warwick Business School, Operational Research and Management Sciences Group</p> <p>01/2004 – 08/2007 Senior Scientist (untenured) ETH Zurich, Institute for Operations Research (IFOR)</p> <p>10/1998 – 12/2003 Research and Teaching Assistant University of Vienna, Center for Business Studies (BWZ)</p>
Other research and teaching experience:	<p>August 10th, 1998 – October 2nd, 1998 Intern, research on Supply Chain Management Plaut Consulting Inc., Boston and Chicago, USA</p> <p>September 1997 – June 1998 Student Tutor, Production and Operations Management University of Vienna, Austria</p>
Honors/Awards:	<ul style="list-style-type: none"> • Nominated for Best Paper Award at EvoCOP 2004 • Erwin Schroedinger Fellowship awarded by the Austrian Science Fund (FWF) (declined) • OEGOR (Austrian Society for Operations Research) Prize for the best PhD dissertation on an OR related topic in 2003 • Best Paper Award in the program track 'Evolutionary Scheduling and Routing' at GECCO 2002 • Student Travel Grant for GECCO 2001 and 2002, awarded by American Association for Artificial Intelligence (AAAI) • Studentship for excellent achievements, awarded by the University of Vienna 1999
Related professional experience:	<p>Member of Editorial Board: Computers and Operations Research</p> <p>Referee for (among others): European Journal of Operational Research Springer Lecture Notes in Computer Science Journal of Heuristics OR Spectrum Computers and Industrial Engineering Transportation Science INFORMS Journal on Computing</p> <p>Member of Program Committees: EvoCOP 2002-2010 GECCO 2005, 2006 MIC 2005 Ants 2006, 2008, 2010 MatHeuristics 2008, 2010</p> <p>Membership of academic societies: INFORMS, POMS, EUROMA</p>

	<p>Administrative Committee work:</p> <p>Center of Business Studies, University of Vienna: Member of the Library Committee, Member of the Faculty Travel Fund Committee <i>Warwick Business School, University of Warwick:</i> Member of the Research Committee <i>School of Social & Economic Sciences, University of Graz:</i> Member of the curricular committee Business Studies (BWL) Member of the working group on equal opportunities (AKGL)</p>
Research interests:	<p>Quantitative analysis and optimization of logistics systems, interface between supply and demand management, adaptive and anticipative behavior of firms in supply chains</p>
Scientific project work:	<p>Project leader/ Principal investigator:</p> <ul style="list-style-type: none">• <i>The best of two worlds: Combining exact and heuristic techniques for solving NP-hard combinatorial optimization problems</i>, funded by Warwick Business School Research Development Fund, awarded 02/2008• <i>Kooperative Liefernetze</i>, funded by BMVIT, completed 02/2005. (jointly with Manfred Gronalt, BOKU WIEN)• <i>Capacity Management and Contract Engineering</i>, funded by Lonza AG, completed 06/2006 (jointly with Prof. Luethi, ETH Zurich) <p>Researcher:</p> <ul style="list-style-type: none">• <i>SFB 010 - Adaptive Information Systems and Modelling in Economics and Management Sciences</i>, funded by FWF, completed 02/2004.• <i>Resitant – Ressourcenmanagement im Transport</i>, funded by Oesterreichische Nationalbank (OENB), completed 12/2003.• <i>Dracula - Optimierung der Blutkonserventransportlogistik</i>, funded by BMVIT, completed 08/2004. <p>Other projects with industrial partners:</p> <ul style="list-style-type: none">• <i>Austria</i>: Gebrüder Weiss, WigeoGIS, Austrian Red Cross• <i>Switzerland</i>: Planzer AG, Synthes Europe GmbH, AMAG• <i>UK</i>: Coventry City Council, Warwickshire County Council
Summary of publications and scientific talks:	<p>3 Edited volumes</p> <p>15 Journal papers</p> <ul style="list-style-type: none">• 3 <i>VHB-Jourqual A</i>• 5 <i>VHB-Jourqual B</i>• 3 <i>VHB-Jourqual C</i>• 1 <i>ISI ranked: (IEEE Trans. on Evolutionary Computation): Impact Factor 2008: 3.736 (9th among 394 CS journals)</i>

17 Papers in refereed conference proceedings

8 Miscellaneous publications

46 Scientific talks

Details can be found in the separate list of publications and scientific talks

Summary of
teaching experience:

Courses held

- **on all levels** (Bachelor, Master, PhD, MBA and executive teaching)
- **at 6 different universities in 4 countries** (*Austria*: University of Vienna, Vienna University of Economics and Business Administration, University of Graz, *Switzerland*: ETH Zurich, *UK*: Warwick Business School, *Brazil*: Pontificia Universidade Catolica do Rio de Janeiro)
- **in German and English**

Supervision of students on all levels

Details can be found in the separate list of teaching experience

Teaching experience

<p>University of Vienna 1998 – 2003</p>	<p><i>UE GZ BWL IV: Produktion und Logistik (1h)</i> <i>UE Produktion und Logistik für Fortgeschrittene (2h)</i> Introductory and intermediate courses on models and solution methods in production and logistics <i>UE Unternehmenslogistik (1h)</i> Advanced course on quantitative techniques for solving problems in corporate logistics <i>PR Modellierung und Analyse von Produktionssystemen (1h)</i> Seminar on the implementation of quantitative methods for analyzing problems in production and logistics <i>EK ABWL Produktion und Logistik (2h)</i> <i>VK ABWL Produktion und Logistik (2h)</i> Introductory module on models and solution techniques in production and logistics (jointly with Prof. Hartl) <i>VK Transportation Logistics (4h) (held in English)</i> Advanced lecture on quantitative models and solution techniques in goods transportation (jointly with Prof. Hartl) <i>SE Produktion und Logistik: Machine Scheduling (2h) (held in English)</i> Seminar on state-of-the-art models and solution techniques in machine scheduling (jointly with Prof. Hartl)</p>
<p>ETH Zurich 2005 – 2007</p>	<p><i>Quantitative Logistics Analysis (3h)</i> Intermediate lecture on quantitative models and solution techniques in Supply Chain Management <i>System Modeling and Optimization (3h)</i> Introductory lecture on application of OR techniques in a business context (jointly with Prof. Luethi, Dr. Hinz and Dr. Laumanns)</p>
<p>Warwick Business School 2007 – 2008</p>	<p><i>Quantitative Methods for Resource Management (1h)</i> Intermediate lecture on quantitative models and solution techniques for business problems (jointly with V. Deineko) <i>Quantitative Analysis for Management (2h)</i> Introductory lecture on application of OR techniques in a business context (jointly with K. Kotiadis, L. Oakshott and S. Stray) <i>Mathematical Programming 3 (2h)</i> Advanced lecture on combinatorial and stochastic optimization for science students (jointly with N. Gulpinar) <i>Modelling and Analysis for Management (3h)</i> MBA lecture on quantitative models and solution techniques for business problems (jointly with S. Robinson and S. Stray) <i>Linear Programming and Heuristics (1 day - 8 hours)</i> Executive teaching for the Operational Research Society <i>Linear Programming and Heuristics (1 day - 8 hours)</i> Executive teaching for Vodafone UK</p>

Vienna University of Economics and Business Administration 2007	<i>Quantitative models for Supply Chain Management</i> Short PhD Course (12h)
Pontifícia Universidade Católica do Rio de Janeiro 2008	<i>Ant Based Optimization in Goods Transportation</i> Short PhD Course (8h) External member of PhD Committee
University of Graz 2009 –	<i>Logistik und Transport (4h)</i> Intermediate module on quantitative models and solution techniques in Supply Chain Management <i>SE Financial and Industrial Management 1 & 2 (2h each)</i> Seminar on state-of-the-art models and solution techniques in production and logistics and presentation seminar of students' masters theses (jointly with P. Greistorfer, H. Kellerer, U. Leopold and U. Pferschy) <i>VO Grundlagen der Produktion und Logistik (3h)</i> First year bachelor course on models and solution techniques in production and logistics (jointly with Peter Greistorfer) <i>VO Masterkurs Produktion und Logistik (2h)</i> First year master level course on quantitative methods for analyzing problems in production and logistics <i>Doctoral colloquium 1 & 2 (1h each)</i> PhD seminars for progress presentations on thesis work (jointly with all other professors within the department) <i>Production Management (2h)</i> Advanced master level course on dynamic and stochastic inventory and lot-sizing problems
University of Vienna, ETH Zurich, Warwick Business School, University of Graz 1998 –	Supervision of several undergraduate, graduate and PhD students

Publications

Edited volumes:

1. Doerner, K., Gendreau, M., Greistorfer, P., Gutjahr, W., Hartl, R.F. and Reimann, M. (2007): *Metaheuristics: Progress in complex Systems Optimization*, Springer, Berlin.
2. Doerner, K. and Reimann, M. (2007): *Logistics of Health Care Management*, Focused Issue in **Computers and Operations Research** **24** (3).
3. Dawid, H., Doerner, K., Dorffner, G., Fent, T., Feurstein, M., Hartl, R.F., Mild, A., Natter, M., Reimann, M. and Taudes A. (2002): *Quantitative models of learning organisations*, Springer, Wien.

Journals:

4. Dawid, H. and Reimann, M.: *Diversification: A road to inefficiency in product innovation*, to appear in **Journal of Evolutionary Economics**.
5. Reimann, M. and Schiltknecht, P.: *The role of flexibility and risk preferences for managing uncertainty: Lessons from a custom manufacturing environment*, **Review of Managerial Science** **3** (2) pp 117—140.
6. Reimann, M. and Schiltknecht, P.: *Studying the interdependence of contractual and operational flexibilities in the market of specialty chemicals*, **European Journal of Operational Research** **198** (3) pp 760—772.
7. Doerner, K., Gronalt, M., Hartl, R.F., Kiechle, G. and Reimann, M. (2008): *Exact and heuristic algorithms for the vehicle routing problem with multiple, interdependent time windows*, **Computers and Operations Research** **35** pp 3034– 3048.
8. Reimann, M. (2007): *Analyzing risk orientation in a stochastic VRP*, **European Journal of Industrial Engineering** **1**(2) pp 111—130.
9. Doerner, K., Hartl, R.F., Kiechle, G., Polacek, M. and Reimann, M. (2007): *Scheduling Periodic Customer Visits for a Travelling Salesperson*, **European Journal of Operational Research** **179** (3) pp 823—837.
10. Reimann, M. and Ulrich, H. (2006): *Comparing backhauling strategies in vehicle routing using Ant Colony Optimization*, **Central European Journal of Operations Research** **14** (2) pp 105—123.

11. Reimann, M. and Laumanns, M. (2006): Savings based Ant Colony Optimization for the Capacitated Minimum Spanning Tree Problem, **Computers and Operations Research** **33** (6) pp 1794—1822.
12. Doerner, K., Gutjahr, W.J., Hartl, R.F., Karall, M. and Reimann, M. (2005): Heuristic solution of an extended double-coverage location problem for Austria, **Central European Journal of Operations Research** **13** (4) pp 325—340.
13. Doerner, K., Hartl, R.F., Polacek, M. and Reimann, M. (2004): A Variable Neighborhood Search for the Multi Depot Vehicle Routing Problem with Time Windows, **Journal of Heuristics** **10** (6) pp 613—627.
14. Dawid, H. and Reimann, M. (2004): Evaluating Market Attractiveness: Individual Incentives vs. Industry Profitability, **Computational Economics** **24** (4) pp 321—355.
15. Reimann, M., Doerner, K. and Hartl, R.F. (2004): D-Ants: Savings based Ants divide and conquer the VRP, **Computers and Operations Research** **31** (4) pp 563—591.
16. Doerner, K., Hartl, R.F. and Reimann, M. (2003): CompetAnts for problem solving - the case of full truckload transportation, **Central European Journal of Operations Research** **11** (2) pp 115—141.
17. Gronalt, M., Hartl, R.F. and Reimann, M. (2003): New Savings Based Algorithms for Time Constrained Pickup and Delivery of Full Truckloads, **European Journal of Operational Research** **151** (3) pp 520—535.
18. Dawid, H., Reimann, M. and Bullnheimer, B. (2001): To Innovate or Not To Innovate?, **IEEE Transactions on Evolutionary Computation** **5** (5) pp 471—481.

Conference
proceedings and
multi-author books:

19. Reimann, M. (2007): *Guiding ACO by Problem Relaxation: A case study on the symmetric TSP*, in: Bartz-Beielstein et al. (Eds.): Hybrid Metaheuristics, Springer LNCS 4771, pp 45—56.
20. Pasia, J., Doerner, K., Hartl, R.F. and Reimann, M. (2007): *Solving a bi-objective vehicle routing problem by pareto-ant colony optimization*, in: Stuetzle, T. et al. (Eds.): Engineering Stochastic Local Search Algorithms. Designing, Implementing and Analyzing Effective Heuristics, Springer LNCS 4638, pp 187—191.

21. Pasia, J., Doerner, K., Hartl, R.F. and Reimann, M. (2007): *A Population-Based Local Search for Solving a Bi-objective Vehicle Routing Problem*, in: Cotta, C. and van Hemert, J. (Eds.): *Evolutionary Computation in Combinatorial Optimization*, Springer LNCS 4446, pp 166—175.
22. Schiltknecht, P. and Reimann, M. (2005): *Valuing product port-folios under uncertainty and limited capacity*, in: Haasis et al. (Eds.): *Operations Research Proceedings 2005*, Springer, Berlin/Heidelberg, pp 185—190.
23. Reimann, M., (2005): *Analyzing a vehicle routing problem with stochastic demands using Ant Colony Optimization*, in: Jaskiewicz et al. (Eds.): *Advanced OR and AI Methods in Transportation*, Poznan Technical University Publishers, Poznan, pp 764—769.
24. Doerner, K., Hartl, R.F., Kiechle, G., Lucka, M. and Reimann, M. (2004): *Parallel Ant Systems for the Capacitated Vehicle Routing Problem*, in: Gottlieb, J. and Raidl, G. (Eds.): *Evolutionary Computation in Combinatorial Optimization*, Springer LNCS 3004, pp 72—83.
25. Reimann, M. and Laumanns, M. (2004): *A hybrid ACO algorithm for the Capacitated Minimum Spanning Tree Problem*, in: Blum et al. (Eds.): *Proceedings of First International Workshop on Hybrid Metaheuristics (HM2004)*, pp 1—10.
26. Brugger, B., Doerner, K., Hartl, R.F. and Reimann, M. (2004): *AntPacking - An Ant Colony Optimization Approach for the One-dimensional Bin Packing Problem*, in: Gottlieb, J. and Raidl, G. (Eds.): *Evolutionary Computation in Combinatorial Optimization*, Springer LNCS 3004, pp 41—50.
27. Reimann, M., Doerner, K. and Hartl, R.F. (2003): *Analyzing a unified Ant System for VRPs and some of its variations*, in: Raidl et al. (Eds.): *Applications of Evolutionary Computing*, Springer LNCS 2611, Berlin/Heidelberg, pp 300—310.
28. Doerner, K., Gronalt, M., Hartl, R.F., Reimann, M. and Zisser, K. (2002): *VRP with interdependent time windows - A case study for the Austrian Red Cross blood programme*, in: Leopold-Wildburger et al. (Eds.): *Operations Research Proceedings 2002*, Springer, Berlin/Heidelberg, pp 144—149.
29. Reimann, M. and Doerner, K. (2002): *Savings based Ants for large scale Vehicle Routing Problems*, in: Leopold-Wildburger et al. (Eds.): *Operations Research Proceedings 2002*, Springer, Berlin/Heidelberg, pp 181—186.

30. Reimann, M., Doerner, K. and Hartl, R.F. (2002): *Insertion based Ants for Vehicle Routing Problems with Backhauls and Time Windows*, in: Dorigo et al. (Eds.): *Ant Algorithms*, Springer LNCS 2463, Berlin/Heidelberg, pp 135—147.
31. Reimann, M., Stummer, M. and Doerner, K. (2002): *A Savings based Ant System for the Vehicle Routing Problem*, in: Langdon et al. (Eds.): *Proceedings of the Genetic and Evolutionary Computation Conference (GECCO 2001)*, Morgan Kaufmann, New York, pp 1317—1325.
32. Doerner, K., Gronalt, M., Hartl, R.F., Reimann, M., Strauss, Ch. and Stummer, M. (2002): *SavingsAnts for the Vehicle Routing Problem*, in: Cagnoni et al. (Eds.): *Applications of Evolutionary Computing*, Springer LNCS 2279, Berlin/Heidelberg, pp 11—20.
33. Dawid, H., Doerner, K., Hartl, R.F. and Reimann, M. (2002): *Ant based computation in the management sciences*, in: Dawid et al: *Quantitative models of learning organisations*, Springer, Berlin/Heidelberg, pp 65—94.
34. Doerner, K., Hartl, R.F. and Reimann, M. (2001): *Cooperative Ant Colonies for Optimizing Resource Allocation in Transportation*, in Boers et al. (Eds.): *Applications of Evolutionary Computing*, Springer LNCS 2037, Berlin/Heidelberg, pp 70—79.
35. Doerner, K., Hartl, R.F. and Reimann, M. (2001): *Ants Solve Time Constrained Pickup and Delivery Problems with Full Truckloads*, in Fleischmann et al. (Eds.): *Operations Research Proceedings 2000*, Springer, Berlin/Heidelberg, pp 395—400.

Other publications:

36. Reimann M., and Leal, J.E. (2009): *ACO for the Single Line Train Scheduling Problem*, in: *Proceedings of MIC 2009*, Hamburg, CD-ROM.
37. Gronalt, M. and Reimann, M. (2004): *Cooperation in Distribution Networks - The effects of information sharing*, in: *Preprints of the Triennial Symposium on Transportation Analysis (Tristan V)*, Guadeloupe, CD-ROM.
38. Doerner, K., Hartl, R.F., Maniezzo, V. and Reimann, M. (2004): *Applying Ant Colony Optimization to the Capacitated Arc Routing Problem*, in: Dorigo et al. (Eds.): *Ant Colony Optimization and Swarm Intelligence*, Springer LNCS 3172, pp 420—421.
39. Doerner, K., Gronalt, M., Hartl, R.F., Reimann, M. and Zisser, K. (2003): *Scheduling blood collecting vehicles for the Austrian Red Cross*, in: *Preprints of ODYSSEUS*, Italy, CD-ROM.

	<p>40. Reimann, M. (2001): <i>On some ideas for Multi-Colony Ant Approaches</i>, GECCO 2001 Graduate Student Workshop, pp 437—440, 7 July 2001, San Francisco, USA.</p> <p>41. Doerner, K., Hartl, R.F. and Reimann, M. (2001): <i>Are COMPETants more competent for problem solving? - the case of a routing and scheduling problem</i>, in: Specter et al. (Eds.): <i>Proceedings of the Genetic and Evolutionary Computation Conference (GECCO-2001)</i>, Morgan Kaufmann, San Francisco, p. 802.</p> <p>42. Reimann, M., Shtovba, S. and Nepomuceno, E. (2001): <i>A hybrid ACO-GA approach to solve Vehicle Routing Problems</i>, Student Papers of the Complex Systems Summer School, Budapest July 15 - August 9 2001, Santa Fe Institute</p> <p>43. Doerner, K., Gronalt, M., Hartl, R.F. and Reimann, M. (2001): <i>Optimizing Real Time Operations in Transportation with an Ant System</i>, in: <i>Preprints of the Triennial Symposium on Transportation Analysis (Tristan IV)</i>, Sao Miguel, Portugal, pp. 701—705.</p>
Submitted manuscripts:	<p>44. Reimann, M. and Gotthardt, B. (2009), A note on 'Multi-product newsvendor problem with limited capacity and outsourcing', European Journal of Operational Research (under review)</p> <p>45. Reimann, M. (2010), Speculative production and anticipative reservation of reactive capacity by a multi-product newsvendor, European Journal of Operational Research (under review)</p>

Scientific Talks

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| 2010 | <ol style="list-style-type: none">1. <i>Speculative production and anticipative reservation of reactive capacity by a multi-product newsvendor</i>, Vienna University of Economics and Business Administration, April 23, 20102. <i>Speculative production and anticipative reservation of reactive capacity by a multi-product newsvendor</i>, University of Bremen, April 7, 2010 |
| 2009 | <ol style="list-style-type: none">3. <i>ACO for the Single Line Train Scheduling Problem</i>, Annual Meeting of the Austrian Society for Operations Research (OEGOR), Graz, Austria, October 23, 20094. <i>ACO for the Single Line Train Scheduling Problem</i>, MIC 2009, Hamburg, July 14, 20095. <i>ACO for the Single Line Train Scheduling Problem</i>, EURO 2009, Bonn, July 6, 2009 |
| 2008 | <ol style="list-style-type: none">6. <i>Vertrags- und Produktionsflexibilität zur Risikominimierung in der Auftragsfertigung</i>, University of Graz, June 13, 2008 |
| 2007 | <ol style="list-style-type: none">7. <i>Guiding ACO by problem relaxation: A case study on the symmetric TSP</i>, AWGM Workshop, Karl Franzens University Graz, November 27, 20078. <i>Guiding ACO by problem relaxation: A case study on the symmetric TSP</i>, HM 2007, Dortmund University, October 8, 20079. <i>An Introduction to Ant Colony Optimization</i>, DIMAP Seminar, WBS, October 30, 200710. <i>Managing uncertainty in a custom manufacturing supply chain</i>, Vienna University of Economics and Business Administration, July 16, 200711. <i>Managing uncertainty in a make-to-order environment</i>, EURO XXII, Prague, July 10, 200712. <i>Managing uncertainty in a make-to-order environment</i>, RSM Erasmus University, May 24, 200713. <i>Managing uncertainty in a make-to-order environment</i>, Vienna University of Economics and Business Administration, May 15, 200714. <i>Managing uncertainty in a make-to-order environment</i>, University of Vienna, March 22, 2007 |

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| | 15. <i>Managing uncertainty in a make-to-order environment</i> , Warwick Business School, January 10, 2007 |
| 2006 | <p>16. <i>Analyzing risk orientation in a stochastic VRP</i>, NOW 2006, St Remy de Provence, August 22-25, 2006</p> <p>17. <i>Capacity Management and Contract Engineering to mitigate Supply chain Risk</i>, EURO 2006, Reykjavik, July 2-5, 2006</p> <p>18. <i>Valuation of product portfolios in manufacturing under uncertain demands</i>, POMS International Conference, Shanghai, June 19-23, 2006</p> <p>19. <i>Ressourceneinsatzplanung im Teilladungsverkehr auf der Strasse</i>, TU Dresden, March 21, 2006</p> |
| 2005 | <p>20. <i>Analyzing a vehicle routing problem with stochastic demands using Ant Colony Optimization</i>, EURO Working Group on Transportation, Poznan, September 13-16 2005</p> <p>21. <i>Ant Colony Optimization for VRPs</i>, Research Seminar, Institute for Theoretical Computer Science, ETH Zurich, February 22 2005</p> |
| 2004 | <p>22. <i>Capacity Management and Contract Engineering in a stochastic Make-To-Order Environment</i>, Research seminar, University of Vienna, October 22 2004</p> <p>23. <i>Applying a Variable Neighborhood Ant System to the Capacitated Vehicle Routing Problem</i>, GOR Meeting, Tilburg, Netherlands, September 1-3 2004</p> <p>24. <i>Cooperation in Distribution Networks – The effects of information sharing</i>, Tristan V, Guadeloupe, June 13-18 2004</p> <p>25. <i>AntPacking - Ants Pack One-Dimensional Bins</i>, CORS/INFORMS Meeting, Banff, May 16-19 2004</p> <p>26. <i>A Variable Neighborhood Search for the Multi Depot Vehicle Routing Problem with Time Windows</i>, Optimization Days, Montreal, Canada, May 10-12 2004</p> <p>27. <i>Ant based Optimization in the logistics of goods transportation</i>, Optimization Seminar, ETH Zurich, Switzerland, March 11 2004</p> |
| 2003 | 28. <i>Ant based Optimization in goods transportation</i> , Annual Meeting of the Austrian Society for Operations Research (OEGOR), Wr. Neustadt, Austria, November 14 2003 |

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| | <ul style="list-style-type: none"> 29. <i>D-Ants Divide and Conquer VRPs</i>, Informs Annual Meeting, Atlanta, USA, October 19-22 2003 30. <i>D-Ants: Savings based Ants for large scale VRPs</i>, Research Seminar, ETH Zurich, Switzerland, August 12 2003 31. <i>D-Ants Divide and Conquer the VRP</i>, Optimization Days, Montreal, Canada, May 5-7 2003 32. <i>Ant Systems Applied to Switch Engine Assignment and Routing in a Railroad Yard</i>, Optimization Days, Montreal, Canada, May 5-7 2003 33. <i>Analyzing a Unified Ant System for the VRP and Some of its Variants</i>, EvoCOP, Colchester, UK, April 14-16 2003 |
| 2002 | <ul style="list-style-type: none"> 34. <i>Savings based Ants for large scale Vehicle Routing Problems</i>, OR 2002, Klagenfurt, Austria, September 2-5 2002 35. <i>Savings based Algorithms for Real World Routing Problems</i>, Sintef, Oslo, Norway, August 27 2002 36. <i>Ant Colony Optimization</i>, Sintef, Oslo, Norway, August 26 2002 37. <i>Disruptive Technologies and the Evolution of Market Shares</i>, Santa Fe Graduate Student Workshop, Santa Fe, USA, July 14-27 2002 38. <i>A Savings based Ant System for the Vehicle Routing Problem</i>, GECCO 2002, New York, USA, July 9-13 2002 39. <i>Innovation and Diversification in Short-lived Markets</i>, Computing in Economics and Finance, Aix en Provence, France, June 27-29 2002 40. <i>Saving with Ants: The Vehicle Routing Problems</i>, Optimization Days, Montreal, Canada, May 6-8 2002 |
| 2001 | <ul style="list-style-type: none"> 41. <i>A hybrid ACO-GA approach to solve Vehicle Routing Problems</i>, Santa Fe Complex Systems Summer School, Budapest, Hungary, July 15-August 9 2001 42. <i>On some ideas for Multi-Colony Ant Approaches</i>, GECCO 2001, San Francisco, USA, July 7-11 2001 43. <i>Optimizing Real Time Operations in Transportation with an Ant System</i>, Tristan IV, Azores, Portugal, June 13-19 2001 44. <i>Cooperative Ant Colonies for Optimizing Resource Allocation in Transportation</i>, EvoCOP, Como, Italy, April 18-19, 2001 |

Marc Reimann – CV

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| 2000 | | 45. <i>Pickup and Delivery of Full Truckloads under Time Window Constraints</i> , YOR 11, Cambridge, UK, March 28-30 2000 |
| 1999 | | 46. <i>Do Local Content Schemes Encourage Innovation?</i> , Workshop on Economics with Heterogeneous Interacting Agents, Genua, Italy, June 4-5 1999 |