

# Tiziana Margaria

## List of publications\*

The contributions are organized along two dimensions:

- **Grouped by category:** invited contributions, journals, books and book chapters, reviewed conference papers, panels, tutorials, refereed tool presentations (with proceedings), industry-oriented papers.
- **With colour tags according to a classification of content:** grouped as Service Engineering, Testing, Formal Methods, Tools, Bio- and Health, (E-)Business, and general Software Engineering. Some contributions belong to more than one group and are thus labelled with more tags.

An index of the contributions according to this classification is provided on page 22.

### Panels

**[P8] Formal Methods Applied in Industry: Success Stories, Limitations, Perspectives,**  
panel at *COMPSAC 2011, the 35<sup>th</sup> Annual Signature Conf. on Computer Software and Applications*, July 20<sup>th</sup> 2011, München (D) – with position paper in the IEEE CS proceedings.

**[P7] Quality of Life in the Social Computer,**  
Discussion leader at *The Social Computer workshop - Internet-Scale Human problem solving*, 30.9.2010, Bruxelles (B).

**[P6] Everything you ever wanted to know about software assurance,**  
panel at *ISSRE 2007, the 18th IEEE International Symposium on Software Reliability Engineering*, 5-9th November, Trollhättan (S).

**[P5] Distributed objects in a world of web services,**  
panel at *ECOOP'07, 21<sup>st</sup> European Conference on Object Oriented Programming*, Berlin, 30.7.-3.8.2007.

**[P4] Proof Tools,**  
panel at *VSTTE 2005, the IFIP WG 2.3 Working Conference on Verified Software: Theories, Tools, Experiments*, Zürich, 10-14. October 2005.

**[P3] Panel Moderator at the I-Day 2005, the ForTIA Industry Day 2005** (The Formal Techniques Industrial Association) of FMEurope, Newcastle upon Tyne, 20<sup>th</sup> July 2005.

**[P2] Major Threat: From Formal Methods without Tools to Tools without Formal Methods,**  
panel at *ICECCS 2004 (9th IEEE Intern. Conf. on Engineering of Complex Computer Systems)* – devoted to *Navigating Complexity in the e-Engineering Age*, Florenz (I), 14-16 April, 2004.

**[P1] Overcoming the Software Crisis by Systematic Project Management,**  
Podiumdiskussion im Rahmen der *OOP 2003 (Objekt-orientiertes Programmieren)*, ICM - International Congress Center Munich, München, 23.1.2003.

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\* Colours correspond to a thematic tagging of the contents: **Service Engineering**, **Testing**, **Formale Methoden**, **Tools**, **Bio- and Health**, **(E-)Business**, **Allg. Software Engineering**.

## Invited Contributions:

[E36] [E36] T. Margaria, B. Floyd, B. Steffen:

**IT Simply Works! Simplicity and embedded systems design**

Invited talk at CORCS/IEESD, The 3rd IEEE Intern. Worksh. on Component-Based Design of Resource-Constrained Systems and the 3rd Worksh. on Industrial Experience in Embedded Systems Design – July 18th, München (D) –co-located with COMPSAC 2011, München (D), Juli 2011 – Paper in the COMPSAC proceedings, IEEE CS Press.

[E35] T. Margaria:

**eXtreme Model Driven Design/Engineering as a disruptive technology in the software development**

Keynote at SEAA 2010 - 36th EUROMICRO Conference on Software Engineering and Advanced Applications (SEAA)- Lille (F), 1-3 Sept.2010.

[E34] T. Margaria:

**eXtreme Model Driven Design/Engineering.**

Invited talk at SYRCoSE 2010 - Spring/Summer Young Researchers' Colloquium on Software Engineering, Nizhny Novgorod (RUS), 1-2 June 2010.

[E33] T. Margaria, B. Steffen:

**Continuous Model-Driven Engineering**

IEEE Computer, October 2009 (vol. 42 no. 10), pp. 106-109,  
<http://doi.ieeecomputersociety.org/10.1109/MC.2009.315>

[E32] [E32] F. Howar, T. Margaria, B. Steffen, C. Wagner:

**Behaviour extraction by efficient automata learning: the Voyager case study,**

3rd IEEE Int. Conf. on Space Mission Challenges for Information Technology (SMC-IT), Track on *Autonomic and Autonomous Space Exploration Systems*, Pasadena, 19-23 July 2009

[E31] [E31] M. Hinchey, M. Jackson, P. Cousot, B. Cook, J. Bowen, T. Margaria:

**Software Engineering and Formal Methods,**

*Communications of the ACM*, Volume 51, Issue 9, September 2008, pp.54 – 59.

[E30][E30] T. Margaria:

**The Semantic Web Services Challenge: Tackling Complexity at the Orchestration Level,**

Invited paper ICECCS 2008 (13th IEEE Intern. Conf. on Engineering of Complex Computer Systems), Belfast (UK), April 2008, pp.183-189, IEEE CS Press.

[E29] [E29] T. Margaria, B. Steffen:

**Middleware: Just Another Level for Orchestration,**

invited paper at MNCNA: *Middleware for Next-generation Converged Networks and Applications*, Workshop of the 8th Internat. Middleware Conference 2007 (ACM), Newport Beach (CA), Nov. 26, 2007.

[E28] T.Margaria:

**Service is in the eyes of the beholder,**

IEEE Computer, Nov. 2007 November 2007 (Vol. 40, No. 11), ISSN: 0018-9162, pp. 33-37.

[E27] T. Margaria:

**Towards SOA/Web2.0 Telco Creation Toolkits,**

Invited presentation at the workshop *IMS and Web2.0/SOA* at the 3rd International FOKUS IMS Workshop, Berlin (D), Fraunhofer Gesellschaft, Nov. 2007.

[E26] T.Margaria:

**Hot topics in the Future of FET,**

invited presentation and position paper - EU Expert meeting *Shaping FET Proactive Initiatives – FET 2009/2010 Program*, 20 - 21 September 2007, Brussels.

[E25] W. Stüttgen, V. Enkrodt, T. Margaria:

**Education 3.0 mit Web 2.0: Status, Stärken, Schwächen, Perspektiven**

Eingeladener Vortrag zur Campus Innovation 2007, auf der *GMW'07*, 12. Europäische Jahrestagung Gesellschaft für Medien in der Wissenschaft, Hamburg, 12.-14. Sept. 2007.

[E24] T. Margaria:

**Thinking in Services: Methodologies and Adoption,**

invited keynote at MEMICS'07, the 3rd Doctoral Workshop on Mathematical and Engineering Methods in Computer Science, Znojmo (CZ), 26-28.10.2007.

[E23] T. Margaria:

**Participation in the Age of Web 2.0**

Keynote at *SEMISH - XXXIV Seminário Integrado de Software e Hardware*, part of the XXVII Conference of the Brazilian Computing Society, Rio de Janeiro (BRA), July 2-6, 2007.

[E22] [E22] T. Margaria, H. Raffelt, B. Steffen, M. Leucker:

**The LearnLib in FMICS-jETI,**

*Proc. ICECCS 2007, 12<sup>th</sup> IEEE Int. Conf. on Engineering of Complex Computer Systems* Auckland (NZ), July 2007, IEEE CS Press, pp.340-349.

[E21] T. Margaria:

**Education 3.0 mit Web 2.0: Was machen die Anderen - Blicke über den eLearning Horizont,**

Keynote at the *Grundfragen Multimedialen Lehrens und Lernens - Neue Medien und Technologien der Informationsgesellschaft*, 19.-20.3.2007, Technische Universität Berlin, Germany.

[E20] T. Margaria:

**Service and software research driving European Competitiveness**

invited talk at the *IST event 2006, Session on Service and Software Architectures, Infrastructures and Engineering*, Helsinki, 22.11.2006.

[E19] [E19] T. Margaria, B. Steffen:

**Service Engineering: Linking Business and IT,**

Cover feature of *IEEE Computer*, Oct. 2006, (invited), issue for the 60<sup>th</sup> anniversary of the Computer Society, Vol. 39, N. 10, pp. 45-55, IEEE CS Press.

[E18] B. Steffen, T. Margaria:

**Continuous Engineering of Embedded Systems,**

*Proc. DIPES 2006, 5th IFIP Working Conference on Distributed and Parallel Embedded Systems*, Braga (P) October, 2006, *Proc. DIPES 2006, 5th IFIP Working Conference on Distributed and Parallel Embedded Systems*, Braga (P) October, 2006, in "From Model-Driven Design to Resource Management for Distributed Embedded Systems", IFIP International Federation for Information Processing Vol. 225, Springer Verlag, pp. 45-54.

[E17] [E17] T. Margaria, C. Kubczak, M. Njoku, B. Steffen:

**Model-based Design of Distributed Collaborative Bioinformatics Processes in the jABC,**

*Proc. ICECCS 2006, 11th IEEE International Conference on Engineering of Complex Computer Systems*. Stanford University, CA (USA), August 2006, IEEE Computer Society Press, pp. 169-176.

[E16] M. Högl, T. Margaria, B. Steffen:

**The Galileogate Solution Factory For Location-Based Integrated Services,**

*Proc. Integrated Design and Process Technology, IDPT-2006*, San Diego (USA), 26-29.6.2006, Society for Design and Process Science, 2006

[E15] A. Arenas, J. Bicarregui, T. Margaria:

**The FMICS View on the Verified Software Repository**

*Journal of Integrated Design & Process Science*, Volume 10, Issue 4 (December 2006), Pages 47-54 Year of Publication: 2006 ISSN:1092-0617 (presented at IDPT 2006, San Diego (USA), June 2006, Society for Design and Process Science).

[E14] [E14] T. Margaria:

**Service Engineering: between Software and Business**

invited talk, *2nd IEEE Systems and Software Week (SASW 2006)*, Columbia, MD, USA, 25-27 April 2006.

[E13] T. Margaria:

**Modeling in the Context of Legacy Systems,**

invited talk, *Distinguished Lecture Series "Theory and Practice of Software Development: Past and Future"*, TAP-SOFT 2005, TU Berlin, February 17-18, 2005.

[E12] T. Margaria:

**Frontiers of Complexity in System-Level Workflows: Interaction and Emerging Behaviour,**

invited contribution to the EU-WP2005-06 Workshop, Bruxelles, 11<sup>th</sup> June 2004.

[E11] T. Margaria:

**Modelling Dependable Systems: What can Model Driven Development Contribute and What Likely Not?,**

Invited paper to ISORC 2004, 7th IEEE Intern. Symposium on *Object-oriented Real-time distributed Computing*, May 12-14, 2004, Vienna (A), IEEE CS Press, pp. 113-120.

[E10] T. Margaria:  
**Aggressive Model-Driven Development: Synthesizing Systems from Models viewed as Constraints**,  
The John von Neumann Minerva Center for Verification of Reactive Systems – *Formal Verification School*, May 16-19, 2004, Kibbutz Shefayim (Israel).

[E9] T. Margaria, B. Steffen:  
**AMDD: Aggressive Model-Driven Development**,  
Invited contribution to the Workshop on *Software and Complex Systems*, satellite to ICECCS 2004, the 9<sup>th</sup> IEEE Int. Conf. on Engineering of Complex Computer Systems, Reggello (FI), Italy, April 14<sup>th</sup> 2004.

[E8] T. Margaria, B. Steffen:  
**Aggressive Model-Driven Development: Synthesizing Systems from Models viewed as Constraints**,  
Workshop on *Software Engineering for Embedded Systems: From Requirements to Implementation*, The Monterey Workshop Series, Chicago, Illinois, September 24-26, 2003. -- Revised Version invited to the Post-Workshop Proceedings.

[E7] T. Margaria:  
**Peopeware in Practice: Human Experiences in Tool Integration in ETI and Lessons Learned for QPQ** –  
1st QPQ Workshop, satellite to CADE-19, Miami (FL), 28.7.2003

[E6] T. Margaria:  
**The Tool Column**  
-- Editorial, *The EASST NEWSLETTER*, Vol. 4, August 2002,  
<http://www.easst.org/newsletter/index.html>

[E5] T. Margaria:  
**The Electronic Tool Integration Platform as a supplier and user of Graph Transformation Tools - Experience and Perspectives**,  
Int. Workshop on *Graph Based Tools (GraBaTs'02)*, Barcelona (E), Oct. 2002, satellite to ICGT 2002, Int. Conference on Graph Transformations, ENTCS Vol. 72 N.2, <http://www.elsevier.com/locate/entcs/volume72.html>

[E4] T. Margaria, B. Steffen:  
**Model Generation for Legacy Systems**  
*Monterey 2002 Workshop on Radical Innovations of Software and Systems Engineering in the Future*, Venice, Italy, October 2002 – LNCS 2941, Springer Verlag, April 2004 – pp. 168-182.

[E3] T. Margaria:  
**Die Einbindung von Middleware in die Reporting Landschaft der Bank: Vorteile eines Toolbasierten Reportings** –  
eingeladener Vortrag zur Konferenz *MIDDLEWARE 2002- Geschäftsprozessoptimierung mit Middleware in Banken - Von der IT-Integration zur prozesskostenorientierten Wettbewerbsfähigkeit*, Mainz, 3.-4. Juni 2002.

[E2] T. Margaria:  
**The Application Layer of the MoSeL Toolset**,  
Vortrag, Final Meeting - Esprit Working Group 8533 *NADA: New Hardware Design Methods*, Lübeck (D), September 20-23, 1997.

[E1] B. Steffen, A. Claßen, M. Klein, J. Knoop, T. Margaria:  
**The Fixpoint Analysis Machine**,  
(invited paper) *CONCUR'95*, 6th Int. Conf. on Concurrency Theory Pittsburgh (USA), Aug. 1995, LNCS 962, pp. 72-87. Springer Verlag.

## Tutorials

[T6] [T6] T. Margaria, S. Jörges:  
**Genesys: Service-Oriented Construction of Property Conform Code Generators**, tutorial at GTTSE'09, 3rd Summer School on Generative and Transformational Techniques in Software Engineering, July 2009, Braga (P).

[T5] T. Margaria:  
**Verification of Parametric systems or Monadic 2<sup>nd</sup> Order Logic in Practice**, tutorial at ETAPS'99, Amsterdam (NL), 27.3.1999.

[T4] B. Steffen, T. Margaria:  
**The METAFrame Agent Building Center: An Integrated Approach to Telephone and Internet service Design**, invited tutorial, ETRI - Electronics and Telecommunication Research Institute, Taejeon (Korea), 26. Aug.1997

[T3] T. Margaria:  
**Women and Intelligent Networks: Experience in a Leading-edge Technological Project**, full-day tutorial, WWC'97, 6<sup>th</sup> Intern. IFIP Conference on Women, Work and Computerization, May 23rd, 1997, Bonn (D), LNCS, Springer Verlag -- (Text vorbereitet mit V. Kriete, B. Massion, C. Molic, J. Schütt, F.-K. Bruhns).

[T2] T. Margaria, K.-F. Bruhns, V. Kriete:  
**Service Creation Environments: Today and Tomorrow**, half-day tutorial, 4th Int. Conf. on Intelligent Networks (ICIN'96), Nov. 1996, Bordeaux (France).

[T1] T. Margaria:  
**The OTTER theorem prover for the verification of circuit design**, (invited tutorial). IFIP TC 10/WG 10.2 Intern. Conference on *Theorem Provers in Circuit Design: Theory, Practice and Experience*, Nijmegen (NL), June 1992.

## Journals

[J36][J36] M. Bakera, T. Margaria, C.D. Renner, B. Steffen:  
**Game-Based Model Checking for Reliable Autonomy in Space**, JACIC, Journal Of Aerospace Computing, Information, and Communication, AIAA – to appear.

[J35][J35][J35] S. Jörges, T. Margaria, B. Steffen:  
**Assuring property conformance of code generators via model checking**.  
Formal Aspects of Computing 23 (5): 589-606 (2011)

[J34] [J34] A.-L. Lamprecht, S. Naujokat, T. Margaria, B. Steffen:  
**Semantics-based composition of EMBOSS services**  
Journal of Biomedical Semantics 2011, 2(Suppl 1):S5.

[J33] T. Margaria, B. Steffen, C. Topnik:  
**Second-Order Value Numbering**.  
ECEASST 30: (2010)

[J32] [J32] A.-L. Lamprecht, T. Margaria, B. Steffen  
**Bio-jETI: a framework for semantics-based service composition**  
BioMed Central (BMC) Bioinformatics 10(Suppl 10):S8, <http://www.biomedcentral.com/1471-2105/10/S10/S8>

[J31] T. Margaria, B. Steffen, C. Kubczak:  
**Evolution support in heterogeneous service-oriented landscapes**.  
In *J. Braz. Computer. Society*. 16(1): 35-47, Springer Verlag, (2010)

[J30] [J30] T. Margaria, B. Steffen:  
**Simplicity as a Driver for Agile Innovation**.  
*IEEE Computer* 43(6): 90-92 (2010)

[J29] N.Blum, T.Margaria:  
**An Open Service Environment for Service Exposure and Orchestration of Heterogeneous NGN Services**,  
in *Praxis in der Informationsverarbeitung und Kommunikation (PIK)*, Fachzeitschrift für den Einsatz von Informationssystemen, ISSN: 0930-5157, e-ISSN: 1865-8342, 33. Jahrgang, Heft 1, 2010, De Gruyter SAUR Verlag, Germany,

[J28] N. Blum, I. Boldea, T. Magedanz, T. Margaria:  
**Service-oriented Access to Next Generation Networks—from Service Creation to Execution**  
In *Mobile Networks and Applications*, Special Issue on Advances In Wireless Test beds and Research Infrastructures, Volume 15, Number 3, 356-365, DOI: 10.1007/s11036-010-0222-1

[J27][J27][J27] S. Jörges, T. Margaria, B. Steffen:  
**Genesys: Service-Oriented Construction of Property Conform Code Generators**,  
In *Innovations in System and Software Engineering - a NASA Journal*, Vol 4. N.4, pp.361-384, Dec. 2008, Springer Verlag.

- [J26] T. Margaria, C. Kubzack, B. Steffen:  
**Bio-jETI: a Service Integration, Design, and Provisioning Platform for Orchestrated Bioinformatics Processes.**  
*BioMed Central (BMC) Bioinformatics 2008*; Supplement dedicated to Network Tools and Applications in Biology 2007 Worksh. (NETTAB 2007) ISSN 1471-2105. Publ. online 2008 Apr. 25. doi: 10.1186/1471-2105-9-S4-S12.
- [J25] A.-L. Lamprecht, T. Margaria, B. Steffen, A. Sczyrba, S. Hartmeier, R. Giegerich:  
**GeneFisher-P: Variations of GeneFisher as Processes in BiojETI.**  
*BioMed Central (BMC) Bioinformatics 2008*; Supplement dedicated to Network Tools and Applications in Biology 2007 Worksh. (NETTAB 2007) ISSN 1471-2105. Publ. online 2008 Apr. 25. doi:10.1186/1471-2105-9-S4-S13
- [J24] M. Bajohr, T. Margaria:  
**MaTRICS: A service-based management tool for remote intelligent configuration of systems,**  
in *Innovations in System and Software Engineering – a NASA Journal*, Vol2, N.2, Springer Verlag, July 2006, pp. 99-111.
- [J23] M. Högl, T. Margaria, B. Steffen:  
**Location-Based Integrated Services: The Galileo Perspective,** in Annual Review of Communication, Int. Engineering Consortium, Chicago (USA), Vol. 58, IEC, 2005. ISBN: 978-1-931695-36-7
- [J22] T. Margaria, H. Raffelt, B. Steffen:  
**Knowledge-based relevance filtering for efficient system-level test-based model generation,**  
*Innovations in System and Software Engineering – a NASA Journal*, Vol. 1, N. 2, pp. 147-156, Springer Verlag, September 2005.
- [J21] [J21] M. Loghi, T. Margaria, G. Pravadelli, and B. Steffen:  
**Dynamic and Formal Verification of Embedded Systems: A Review,**  
special issue on "Testing of Embedded Systems", I. Harris and F. Fummi (eds.), in the International Journal of Parallel Programming (IJPP), Springer Science+Business Media, Vol. 33 N. 6, Dec. 2005, pp. 585-611.
- [J20][J20] T. Margaria:  
**Web Services-Based Tool-Integration in the ETI Platform,**  
*SoSyM, Int. Journal on Software and System Modelling*, Vol. 4, N. 2, May 2005, pp. 141 – 156, Springer Verlag, (available in Online First, DOI: 10.1007/s10270-004-0072-z).
- [J19][J19] T. Margaria, B. Steffen:  
**Aggressive Model Driven Development for the Management of Service Evolution,**  
*In Annual Review of Communication*, Int. Engineering Consortium, Chicago (USA), Vol. 57, IEC, Nov. 2004, ISBN 1-931695-28-8
- [J18] T. Margaria B. Steffen:  
**Lightweight Coarse-grained Coordination: A Scalable System-Level Approach,**  
in STTT, Special Section on *Formal Methods in Industrial Critical Systems*, of the *Int. Journal on Software Tools for Technology Transfer*, Vol.5, N.2-3, 2004, Springer Verlag, pp.107-123.
- [J17] A. Hagerer, H. Hungar, T. Margaria, O. Niese, B. Steffen:  
**An Operational Procedure for Model-Based Testing of CTI Systems,**  
in *Annual Review of Communication*, Int. Engineering Consortium, Chicago (USA), Vol. 56, IEC, 2003.
- [J16] A. Hagerer, T. Margaria, O. Niese, B. Steffen, G. Brune, H.-D. Ide:  
**Efficient Regression Testing of CTI-Systems: Testing a Complex Call-Center Solution,**  
in *Annual Review of Communication*, Int. Engineering Consortium Chicago (USA), Vol. 55, pp.1033-1039, IEC, 2002
- [J15] [J15] B. Jonsson, T. Margaria, G. Naeser, J. Nyström, B. Steffen:  
**Incremental Requirement Specification for Evolving Systems,**  
*Nordic Journal of Computing* Vol.8, N.1, Spring 2001, pp. 65-87.
- [J14] V. Braun, T. Margaria, B. Steffen:  
**The Electronic Tool Integration Platform,**  
Special Theme Issue on "*Internet Based Technology Transfer Services*" of the *Journal Asia Pacific Tech Monitor*, 2001.
- [J13] O. Niese, A. Hagerer, T. Margaria, M. Nagelmann, B. Steffen, G. Brune, H.-D. Ide:  
**An Automated Testing Environment for CTI Systems Using Concepts for Specification and Verification of Workflows,**  
In Annual Review of Communication, Int. Engineering Consortium Chicago (USA), Vol. 54, pp. 927-936, IEC, 2001.

- [J12] T. Margaria, V. Braun, J. Kreileder:  
**Interacting with ETI: A User Session,**  
*STTT, Int. Journal on Software Tools for Technology Transfer*, Vol.1 (1/2), 1997, Springer Verlag, pp. 49-63.
- [J11] T. Margaria, V. Braun, C. Weise:  
**Integrating Tools in ETI,**  
*STTT, Int. Journal on Software Tools for Technology Transfer*, Vol.1 (1/2), 1997, Springer Verlag, pp. 31-48.
- [J10] [J10] B.Steffen, V. Braun, T. Margaria:  
**The Electronic Tool Integration Platform: Concepts and Design,**  
*STTT, Int. Journal on Software Tools for Technology Transfer*, Vol.1 (1/2), 1997, Springer Verlag, pp. 9-30.
- [J9] T.Margaria, R. Cleaveland, B. Steffen:  
**Editorial,**  
*STTT, Int. Journal on Software Tools for Technology Transfer*, Vol.1 (1/2), 1997, Springer Verlag, pp. 1-5.
- [J8] B. Steffen, T. Margaria, V. Braun, N. Kalt:  
**Hierarchical Service Definition,**  
*Annual Review of Communication*, Int. Engineering Consortium Chicago (USA), IEC, 1997, pp. 847-856.
- [J7] B. Steffen, T. Margaria:  
**Tools Get Formal Methods into Practice,**  
*ACM Computing Surveys* 28A(4), position statement, ACM Workshop on *Strategic Directions in Computing Research*, Working Group on Formal Methods (Co-Chairs E. Clarke, J. Wing), December 1996, <http://www.acm.org/surveys/1996/SteffenTools/>
- [J6] B. Steffen, T. Margaria:  
**Method Engineering for Real-Life Concurrent Systems,**  
*ACM Computing Surveys* 28A(4), December 1996 - position statement, ACM Workshop on *Strategic Directions in Computing Research*, Working Group on Concurrency (Chair S. Smolka), <http://www.acm.org/surveys/1996/SteffenMethod/> .
- [J5] B. Steffen, T. Margaria, A. Claßen, V. Braun:  
**Incremental Formalization: a Key to Industrial Success**  
 Eingeladen, in ``SOFTWARE: Concepts and Tools'', Vol. 17, N.2, pp. 78-91, Springer Verlag, July 1996.
- [J4] B. Steffen, T. Margaria, A. Claßen:  
**Heterogeneous Analysis and Verification for Distributed Systems,**  
 ``SOFTWARE: Concepts and Tools'' Vol. 17, N.1, pp. 13-25, March 1996, Springer Verlag.
- [J3] B. Steffen, T. Margaria, A. Claßen, V. Braun, M. Reitenspieß:  
**An Environment for the Creation of Intelligent Network Services,**  
*Annual Review of Communication*, Int. Engineering Consortium Chicago (USA), IEC, 1996, pp. 919-935.  
 - also invited to the book ``Intelligent Networks: IN/AIN Technologies, Operations, Services, and Applications -- A Comprehensive Report'' IEC, 1996, pp. 287-300.
- [J2] P. Camurati, T. Margaria, P. Prinetto:  
**The OTTER environment for resolution-based proof of hardware correctness,**  
*Microprocessing and Microprogramming*, The Euromicro Journal, Vol. 30, n. 1-5, August 1990, pp. 413-419.
- [J1] P. Camurati, T. Margaria, P. Prinetto:  
**Systolic array description in F<sup>2</sup>,** *Microprocessing and Microprogramming*, The Euromicro Journal, Vol. 27, n. 1-5, Sept. 1989, pp. 171-178.

## Books and Book Chapters

- [B17] [B17][B17] F. Howar, M. Merten, B. Steffen, T. Margaria:  
**Practical Aspects of Active Automata Learning**  
In "Formal Methods for Industrial Critical Systems - A Survey of Applications", John Wiley, 2012 (in print)
- [B16] [B16][B16] J. Neubauer, T. Margaria, B. Steffen:  
**Design for Verifiability: The OCS Case Study**  
In "Formal Methods for Industrial Critical Systems - A Survey of Applications", John Wiley, 2012 (in print)
- [B15] [B15] T. Margaria, S. Boßelmann, M. Doedt, B. D. Floyd, B. Steffen:  
**Customer-Oriented Business Process Management: Vision and Obstacles**  
in *Conquering Complexity*, Mike Hinchey and Lorcan Coyle Eds., Springer Verlag – 2012.
- [B14][B14][B14] T. Margaria, B. Steffen:  
**Service Orientation: Conquering complexity with XMDD**  
in *Conquering Complexity*, Mike Hinchey and Lorcan Coyle Eds., Springer Verlag - 2012
- [B13][B13] C. Kubczak, T. Margaria, B. Steffen:  
**Advances in Solving the Mediator Scenarios with jABC and Evaluation of the SWS Challenge Evaluation -**  
in "Semantic Services: Advancement through Evaluation", Springer Verlag – 2012.
- [B12] [B12] [B12] T. Margaria, B. Steffen:  
**Business Process Modelling in the jABC: The One-Thing-Approach,**  
*Handbook of Research on Business Process Modeling*, J. Cardoso and W. van der Aalst (eds.), IGI Global, 2009
- [B11] [B11] C. Rasche, T. Margaria, A. Braun von Reinersdorff:  
**Value delivery through IT-based healthcare architectures: Towards a competence-based view of service**  
In *25 Jahre ressourcen- und kompetenzorientierte Forschung – Der kompetenzbasierte Ansatz auf dem Weg zum Schlüsselparadigma in der Managementforschung*, M. Stephan, W. Kerber, T. Kessler, M. Lingenfelder (Hrsg.), Gabler Verlag, Springer Fachmedien – ISBN 978-3-8349-2192-5, pp. 417-443.
- [B10] S. Kopka, T. Margaria, B. Steffen:  
**Wettbewerbsvorteile durch Prozesskompetenzen: Kalkulation von IT Services und wirtschaftliche Erfolgskontrolle durch Prozessautomatisierung**  
In *25 Jahre ressourcen- und kompetenzorientierte Forschung – Der kompetenzbasierte Ansatz auf dem Weg zum Schlüsselparadigma in der Managementforschung*, M. Stephan, W. Kerber, T. Kessler, M. Lingenfelder (Hrsg.), Gabler Verlag, Springer Fachmedien – ISBN 978-3-8349-2192-5, pp. 445-462.
- [B9][B9] C. Petrie, U. Küster, T. Margaria, M. Zaremba, H. Lausen, S. Komazec:  
**Status, Perspectives, and Lessons Learned,**  
In *Semantic Web Services Challenge - Results from the First Year*, Charles Petrie, Tiziana Margaria, Michal Zaremba, and Holger Lausen (eds.), Springer Verlag, 2009, pp. 275-284 - ISBN: 978-0-387-72495-9
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**Comparison: Handling Preferences with DIANE and miAamics,**  
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## Thematic Groups:

### Service Engineering

[E5][E7][E12][E16][E18][E24][E27][E28][E29][E30][E36],  
[T2][T3] [T6],  
[J3][J8][J10][J12][J14][J19][J20][J23][J24][J27][J28][J29][J31][J32][J34]  
[J35]  
[B2][B3][B4][B5][B6][B7][B8][B9][B12][B13][B14][B15][B16][B17]  
[C15][C16][C17][C18][C23][C24][C25][C26][C28][C32][C39][C44][C45]  
[C46][C50][C51][C53][C59][C63][C66][C67][C68][C69][C70][C71][C72]  
[C73][C75][C82][C84][C86][C88][C89][C90][C91][C92][C95][C97][C99]  
[C100][C101][C102][C103][C104][C109]  
[I1] [I2] [I3] [I10], [W7][W15][W22]

### Testing

[E22], [J13] [J16] [J17] [J22], [B1]  
[C35] [C36] [C38] [C41] [C42] [C43] [C55] [C78] [C85], [W8]

### Formal Methods

[E4][E8][E9][E10][E11] [E31], [T4],  
[J4][J5][J6][J7][J9][J10][J15][J21][J27][J33][J35][J36]  
[B2][B4][B5][B16][B17]  
[C1][C2][C4][C8][C10][C11][C12][C13][C14][C20][C22][C28][C31][C30]  
[C34][C40][C46][C47][C54][C57][C60][C68][C71][C76][C77][C78][C79]  
[C81][C83][C84][C90][C96][C100][C101][C102][C103][C104][C105][C109]  
[Ct13] [W1][W3][W4][W5][W6][W8][W9][W10][W18][W21]

### Tools

[P4], [E1][E2][E6][E15][E17][E22][E29][E32], [T1] [T5],  
[J1] [J2] [J27] [J33][J35][J36], [B4][B6][B7][B8][B13][B16][B17]  
[C3][C5][C6][C7][C9][C19][C21][C29][C37][C40][C51][C53][C61][C62]  
[C63][C65][C66][C69][C70][C71][C72][C73][C74][C76][C80][C81][C83]  
[C84][C89][C91][C96],  
[Ct1][Ct2][Ct3][Ct4][Ct5][Ct6][Ct7][Ct8][Ct9][Ct10][Ct11][Ct12][Ct13]  
[I7][I8], [W2] [W3] [W11] [W12] [W13]

### Bio- and Health

[E17] [J25][J26][J32][J34] [B11]  
[C62][C67][C74][C75][C82][C90][C95][C102][C103][C104]  
[I8][I9][I13] [W14][W16][W17][W20]

### Business and E-Business

[P7] [E3][E14][E19][E30], [J25][J30],  
[B4][B5][B9][B10][B11][B12][B14][B15]  
[C33][C39][C44][C72][C73][C79][C80][C93][C97], [I3][I4][I5][I13],  
[W14][W15][W16][W17][W18][W19][W20][W22]

### Software Eng.

[P1][P3][P5][P6][P8],  
[E14][E13][E17][E21][E23][E25][E26][E31][E33][E34][E35][E36],  
[T6] [J11] [J15] [J18] [J19] [J20] [J21] [J30], [B12][B14]  
[C27][C35][C45][C47][C52][C55][C56][C57][C64][C87][C92][C94] [C98]  
[C100][C105][C106][C107][C108][C109]  
[Ct12], [I2][I6] [I9][I11][I12] [W22]

### Others

[M1]