

Mirco Tribastone

Posizione attuale: Professore associato di seconda fascia in Informatica (s.s.d. INF/01)

Affiliazione: Unità di ricerca Systems Modeling and Analysis (SYSMA)
Scuola IMT Altì Studi Lucca

Istruzione

2006-2010 Ph.D. in Informatics presso il Laboratory for Foundations of Computer Science, School of Informatics, Università di Edimburgo (UK).

1999-2005 Laurea in Ingegneria Informatica, Università di Catania.

Posizioni accademiche ricoperte

06/2016-08/2019 *Visiting Professor* presso Institute of Software Engineering and Automotive Informatics, Technical University of Braunschweig, Germania.

02/2015-04/2019 *Visiting Professor* presso il Gran Sasso Science Institute L'Aquila per l'erogazione del corso intitolato *Performance Modelling* per i cicli XXX-XXIV.

09/2013-12/2014 *Associate Professor* presso School of Electronics and Computer Science, Università di Southampton, UK.

04/2010-08/2013 *W1 Professor (Juniorprofessur)* presso l'unità *Programming and Software Engineering* del Dipartimento di Informatica, Università Ludwig-Maximilians di Monaco di Baviera, Germania.

01/2006-03/2010 *Research Assistant/Ph.D. student* presso Laboratory for Foundations of Computer Science, School of Informatics, Università di Edimburgo, UK.

Fellowship e titoli accademici

2015-2018 *Mercator Fellowship* finanziata da Deutsche Forschungsgemeinschaft (DFG) collegata al progetto DAPS2 (Special Priority Programme SPP 1593, <http://www.dfg-spp1593.de>).

2017-2023 Abilitazione scientifica nazionale (ASN) come professore di prima fascia, settore concorsuale 01/B1 - Informatica.

Finanziamenti per progetti di ricerca

11/2019-10/2021 Progetto *Made in Viareggio nell'industria nautica: pattern recognition, tecnologie abilitanti e competenze per la digital innovation*, finanziato da Fondazione Cassa di Risparmio di Lucca nell'ambito del Bando 2019-2021 "Ricerca".
Ruolo: **coordinatore scientifico**.
Finanziamento: euro 40.000.

09/2019-08/2022 Progetto *SEDUCE: Designing Spatially Distributed Cyber-Physical Systems under Uncertainty*, finanziamento MIUR PRIN 2017 (Linea B - "Giovani").
Ruolo: **coordinatore scientifico nazionale**. Altri nodi afferenti al progetto: Università di Camerino (Prof. Francesco Tiezzi), Gran Sasso Science Institute L'Aquila (Dott. Catia Trubiani), Università di Trieste (Prof. Luca Bortolussi).
Finanziamento complessivo: euro 656.110.
Finanziamento nodo IMT: euro 162.110.

12/2017-12/2019 Progetto *SAXA—Software Adaptation for Extreme Automation*, finanziato da Regione Toscana (schema FSE-POR).
Ruolo: **coordinatore scientifico**.
Finanziamento: euro 54.000.

12/2015-11/2018 **Fellowship Mercator** finanziata da Deutsche Forschungsgemeinschaft (DFG) collegata al progetto DAPS2 (Special Priority Programme SPP 1593, <http://www.dfg-spp1593.de>).
Finanziamento: euro 54.800.

- 04/2013-03/2017 Progetto *QUANTICOL—A Quantitative Approach to Management and Design of Collective and Adaptive Behaviours*, finanziato dal programma EU-FET FP7.
Ruolo: **coordinatore scientifico locale** (nodi Università Ludwig-Maximilians di Monaco di Baviera e Università di Southampton).
Progetto coordinato da Università di Edimburgo (Prof. Jane Hillston); altri nodi afferenti al progetto: CNR Pisa (Dott. Mieke Massink); Scuola IMT Alti Studi Lucca (Prof. Rocco De Nicola), INRIA Grenoble (Dott. Nicolas Gast).
Finanziamento: euro 336.777.
- 10/2012-09/2015 Progetto *DAPS—Scalable Design and Performance Analysis for Long-Living Software Families*, finanziato da Deutsche Forschungsgemeinschaft (DFG) nell'ambito dello Special Priority Programme SPP 1593, <http://www.dfg-spp1593.de>.
Ruolo: **coordinatore scientifico** (progetto congiunto con co-PI: Prof. Ina Schaefer, Institut für Softwaretechnik und Fahrzeuginformatik, Technische Universität Braunschweig).
Finanziamento: euro 258.658.
- 10/2012-09/2015 Progetto *FEMPA—Fluid Equivalences for Markovian Process Algebra*, finanziato da Deutsche Forschungsgemeinschaft (DFG).
Ruolo: **coordinatore scientifico**.
Finanziamento: euro 260.400.

Attività seminariali su invito

- 15/09/2010 Seventh International Conference on the Quantitative Evaluation of Systems, Williamsburg, Virginia: *Scalable Differential Analysis of Large Process Algebra Models* (tutorial).
- 08/02/2011 D3S Seminar, Charles University, Praga: *Process Algebras for Performance Evaluation — An Overview* (seminario).
- 07/03/2011 Dipartimento di Sistemi e Informatica, Università di Firenze: *Continuous-state Explosion of Process Algebra Models* (seminario).
- 09/03/2011 IMT Institute for Advanced Studies Lucca: *Large-scale Performance Models with Stochastic Process Algebras* (seminario).
- 24/05/2011 International Workshop on Quantitative Modelling and Formal Analysis, IMT Institute for Advanced Studies Lucca: *Differential Aggregations for Stochastic Process Algebra Models* (relatore invitato).
- 21/09/2011 Centro Studi Feliciano Rossitto, Ragusa: *Modelli Quantitativi di Sistemi Dinamici* (relatore invitato).
- 05/10/2011 Performance Day, Frankfurt, Germany: *Scalable Performance Prediction of Computer Systems* (relatore invitato).
- 06/03/2012 Università di Edimburgo: *Formal Methods for Software Performance Engineering: Theory and Applications* (seminario).
- 22/05/2012 GI-Seminar, Dagstuhl, Germania: *Performance Modelling of Large-Scale Hierarchical Systems* (relatore invitato).
- 30/05/2012 GI-Seminar, Dagstuhl, Germaia: *Performance Modelling of Design Patterns for Distributed Computation* (relatore invitato).
- 08/09/2012 Joint Workshop on Compositional Modelling and Analysis of Quantitative Systems (MLQA 2012), Università di Edimburgo: *Exact Aggregation for Fluid Process Algebra Models* (relatore invitato).
- 30/11/2012 PUMA Seminar, Technical University of Munich: *Continuous Limits for Massive-Scale Models of Computing Systems* (seminario).
- 03/12/2012 Royal Holloway College, Londra: *Formal Methods for Software Performance Engineering: Theory and Applications* (seminario).
- 07/12/2012 PUMA Seminar, Technical University Munich: *Lumpability for Fluid Process Algebra Models* (seminario).

- 27/09/2013 Workshop on Probabilistic and Hybrid Systems Verification, ISCAS, Beijing, Cina: *Efficient State-Space Aggregations for Large-Scale Dynamical Systems* (relatore invitato).
- 10/02/2014 Politecnico di Milano: *Scalable Performance Analysis and Optimisation of Massively-parallel Software Systems: An Overview* (seminario).
- 04/06/2014 QAV Seminar, Università di Oxford: *Ordinary Lumpability for Stochastic Process Algebras with Discrete and Continuous Semantics* (seminario).
- 10/11/2014 Fortiss gmbh, Monaco di Baviera: *Scalable Performance Analysis and Optimisation of Massively-parallel Software Systems: An Overview* (seminario).
- 11/11/2014 PST Seminar, Università Ludwig-Maximilians di Monaco di Baviera: *Exact Fluid Lumpability for Chemical Reaction Networks* (seminario).
- 26/11/2014 QAV Seminar, Università di Oxford: *Three Behavioural Equivalences for Chemical Reaction Networks* (seminario).
- 11/11/2015 Young European Queueing Theories Workshop (YEQT IX), Eindhoven: *Fluid limits for formal models of software performance* (relatore invitato).
- 06/04/2016 DISIA, Università di Firenze: *Equivalence relations for ordinary differential equations* (seminario).
- 14/04/2016 Microsoft Research Cambridge: *Equivalence relations for ordinary differential equations* (seminario).
- 10/05/2016 Università di Edimburgo: *Equivalence relations for ordinary differential equations* (seminario).
- 12/07/2016 Technical University Braunschweig: *Fluid models of software performance* (seminario).
- 19/07/2016 Università di Rostock: *Equivalence relations for ordinary differential equations* (seminario).
- 09/10/2017 International Symposium on Quantitative Systems: Theory and Applications (QuaSy 2017), Como, Italy: *Bisimulations for Polynomial Differential Equations* (relatore invitato).
- 08/11/2017 Dagstuhl Seminar 14452 on “Algorithmic Cheminformatics”: *Bisimulations for Differential Equations* (relatore invitato).
- 07/03/2018 Gran Sasso Science Institute, L’Aquila: *Bisimulations for Polynomial Differential Equations* (seminario).
- 08/11/2018 ISOLA 2018, X-by-C Track, Limassol, Cyprus: *Towards Software Performance by Construction* (relatore invitato).
- 10/12/2018 Winter Simulation Conference 2018, Götenburg, Svezia: *Speeding up stochastic and deterministic simulation by aggregation: an advanced tutorial* (tutorial).
- 14/12/2018 Kolchin Seminar, New York University: *Maximal aggregation of polynomial differential equations* (seminario, video: <https://www.youtube.com/watch?v=6cKJRNwjMVk>).
- 28/10/2019 CACSB Seminar, University of Konstanz: *Automatic Simplification of Large-scale Reaction Networks* (seminario, video: <https://www.youtube.com/watch?v=GxdnWrJHzkM>).

Organizzazione di convegni scientifici

Membro di Comitato di Programma

- Winter Simulation Conference 2020 (Advanced Tutorials Track), <http://meetings2.informs.org/wordpress/wsc2020>
- 2020 ACM SIGSIM Conference on Principles of Advanced Discrete Simulation (PADS), <https://www.acm-sigsim-pads.org>
- 18th International Conference on Computational Methods in Systems Biology (CMSB 2020), <https://cmsb2020.uni-saarland.de>
- 17th International Conference on Quantitative Evaluation of Systems (QEST 2020), <http://www.qest.org/qest2020>
- 11th ACM/SPEC International Conference on Performance Engineering (ICPE 2020), <https://icpe2020.spec.org>
- 47th ACM SIGPLAN Symposium on Principles of Programming Languages (POPL 2020), <https://popl20.sigplan.org>
- 16th International Conference on Quantitative Evaluation of Systems (QEST 2019), <http://www.qest.org/qest2019>
- 10th ACM/SPEC International Conference on Performance Engineering (ICPE 2019), <https://icpe2019.spec.org>
- 5th International Colloquium on Automata, Languages, and Programming (ICALP 2018), <https://iuuk.mff.cuni.cz/events/icalp2018>
- 9th ACM/SPEC International Conference on Performance Engineering (ICPE 2018), <https://icpe2018.spec.org>
- 44th ACM SIGPLAN Symposium on Principles of Programming Languages (POPL 2017), *External Review Committee*, <https://popl17.sigplan.org>
- 8th ACM/SPEC International Conference on Performance Engineering (ICPE 2017), <https://icpe2017.spec.org>
- 27th International Conference on Concurrency Theory (CONCUR 2016), <https://www.concur2016.ulaval.ca>
- 7th International Workshop on Static Analysis and Systems Biology (SASB 2016), <https://sasb2016.fi.muni.cz>
- 7th International Workshop on Formal Methods and Analysis in Software Product Line Engineering (FMSPLE 2016), <https://etaps.org/2016/workshops?id=260#FMSPLE>
- 12th International Conference on Quantitative Evaluation of Systems (QEST 2015), <http://www.qest.org/qest2015/>
- 6th ACM/SPEC International Conference on Performance Engineering (ICPE 2015), <https://icpe2015.spec.org>
- 11th European Workshop on Performance Engineering (EPEW 2014), <http://www.epew2014.unifi.it>
- 7th International Conference on Simulation Tools and Techniques (SIMUTOOLS 2014), <https://eudl.eu/proceedings/SIMUTOOLS/2014>
- 7th International Workshop on Practical Applications of Stochastic Modelling (PASM 2014), <http://homepages.cs.ncl.ac.uk/nigel.thomas/PASM14.htm>
- 11th International Conference on Quantitative Evaluation of Systems (QEST 2014), <http://www.qest.org/qest2014/>

- 8th International Conference on Performance Evaluation Methodologies and Tools (VALUETOOLS 2014), <http://archive.valuetools.org/2014/show/home>
- 10th European Workshop on Performance Engineering (EPEW 2013), <https://www.dais.unive.it/EPEW13/>
- 4th ACM/SPEC International Conference on Performance Engineering (ICPE 2013), <https://icpe2013.spec.org>
- 11th International Workshop on Quantitative Aspects of Programming Languages and Systems (QAPL 2013), <http://qapl2013.units.it>
- 7th International Conference on Performance Evaluation Methodologies and Tools (VALUETOOLS 2013), <http://archive.valuetools.org/2013/show/home>
- 6th International Conference on Simulation Tools and Techniques (SIMUTOOLS 2013), <https://eudl.eu/proceedings/SIMUTOOLS/2013>
- 3rd ACM/SPEC International Conference on Performance Engineering (ICPE 2012), <https://icpe2012.spec.org>
- 9th International Conference on Integrated Formal Methods (iFM 2012), <http://ifm.isti.cnr.it/page21/indexifm.html>
- 5th International Workshop on Practical Applications of Stochastic Modelling (PASM 2012), <http://homepages.cs.ncl.ac.uk/nigel.thomas/PASM12.htm>
- 9th International Conference on Quantitative Evaluation of Systems (QEST 2012), <http://www.qest.org/qest2012/>
- 8th European Workshop on Performance Engineering (EPEW 2011), <http://homepages.cs.ncl.ac.uk/nigel.thomas/EPEW2011/>
- 4th International Workshop on Practical Applications of Stochastic Modelling (PASM 2011), <http://homepages.cs.ncl.ac.uk/nigel.thomas/PASM11.htm>
- 4th International Conference on Simulation Tools and Techniques (SIMUTOOLS 2011), <https://eudl.eu/proceedings/SIMUTOOLS/2011>

Chair di Comitato di Programma

- *Awards Selection Committee Chair* per 11th ACM/SPEC International Conference on Performance Engineering (ICPE 2020).
- *Work in Progress and Vision Track Chair* per 10th ACM/SPEC International Conference on Performance Engineering (ICPE 2019).
- *Program Chair* per 14th International Workshop on Quantitative Aspects of Programming Languages and Systems (QAPL 2016).
- *Program Chair* per 13th International Workshop on Quantitative Aspects of Programming Languages and Systems (QAPL 2015).
- *Tutorial Chair* per 3rd ACM/SPEC International Conference on Performance Engineering (ICPE 2013).
- *General Chair* per 9th European Performance Engineering Workshop (EPEW 2012).
- *General Chair* per 10th Workshop on Process Algebras and Stochastically Timed Activities (PASTA 2010).

Incarichi istituzionali

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| 2019-oggi | Delegato del Direttore per i Sistemi Informativi della Scuola IMT Alti Studi Lucca. |
| 2019-oggi | Membro del Presidio di Qualità della Scuola IMT Alti Studi Lucca. |

- 2018-2020 Membro del Senato Accademico della Scuola IMT Altissimi Studi Lucca.
- 2015-oggi Delegato del Direttore per la Didattica e per l'Alta Formazione della Scuola IMT Altissimi Studi Lucca.
- 2016-oggi Direttore del curriculum *Computer Science and Systems Engineering* dei programmi di dottorato della Scuola IMT Altissimi Studi Lucca *PhD in Institutions, Markets, and Technologies* (cicli XXXI e XXXII) cicli XXXII, XXXIII, XXXIV e XXXV) e *Systems Science* (cicli XXXIII, XXXIV e XXXV).
- 2015-oggi Membro dei seguenti Collegi dei Docenti:
- Programma di Dottorato *PhD in Institutions, Markets, and Technologies* (cicli XXXI e XXXII)
 - Programmi di Dottorato *Systems Science* e *Cognitive and Cultural Systems* (cicli XXXIII, XXXIV e XXXV).

Incarichi editoriali

- 2016 Co-editor (con Herbert Wiklicky) del volume "Proceedings 14th International Workshop Quantitative Aspects of Programming Languages and Systems, QAPL 2016, Eindhoven, The Netherlands, April 2-3, 2016". Electronic Proceedings in Theoretical Computer Science, vol. 227, 2016.
- 2015 Co-editor (con Nathalie Bertrand) del volume "Proceedings Thirteenth Workshop on Quantitative Aspects of Programming Languages and Systems, QAPL 2015, London, UK, 11th-12th April 2015". Electronic Proceedings in Theoretical Computer Science, vol. 194, 2015.
- 2013 Co-editor (con Stephen Gilmore) del volume "Computer Performance Engineering - 9th European Workshop, EPEW 2012, Munich, Germany, July 30, 2012, and 28th UK Workshop, UKPEW 2012, Edinburgh, UK, July 2, 2012, Revised Selected Papers". Lecture Notes in Computer Science 7587, Springer 2013, ISBN 978-3-642-36780-9.

Attività di valutatore e revisore

Riviste internazionali

ACM Performance Evaluation Review, ACM Transactions on Cyber-Physical Systems, Automated Software Engineering, Communications of the ACM, IEEE/ACM Transactions on Networking, IEEE Transactions on Computers, IEEE Transactions on Software Engineering, Logical Methods in Computer Science, Performance Evaluation, Theoretical Computer Science, Scientific Reports.

Enti di finanziamento

Agence Nationale de la Recherche (ANR, Francia), Deutsche Forschungsgemeinschaft (DFG, Germania), Wiener Wissenschafts-, Forschungs- und Technologiefonds (WWTF, Austria).

Software scientifico

- Sviluppatore principale del *PEPA Eclipse plug-in* (disponibile presso <http://www.dcs.ed.ac.uk/pepa/tools/plugin/>), un plug-in del sistema Eclipse per l'analisi di modelli prestazionali descritti nell'algebra di processo stocastica PEPA.
- *ERODE* (disponibile presso <http://erode.eu/>), un applicativo per l'analisi e la riduzione di sistemi di equazioni differenziali ordinarie.

Pubblicazioni scientifiche

Articoli su rivista

- [1] L. Cardelli, M. Tribastone, and M. Tschaikowski, "From electric circuits to chemical networks," *Nat. Comput.*, vol. 19, no. 1, pp. 237–248, 2020. [Online]. Available: <https://doi.org/10.1007/s11047-019-09761-7>

- [2] L. Cardelli, M. Tribastone, M. Tschaikowski, and A. Vandin, “Symbolic computation of differential equivalences,” *Theor. Comput. Sci.*, vol. 777, pp. 132–154, 2019. [Online]. Available: <https://doi.org/10.1016/j.tcs.2019.03.018>
- [3] N. Gast, L. Bortolussi, and M. Tribastone, “Size expansions of mean field approximation: Transient and steady-state analysis,” *Perform. Evaluation*, vol. 129, pp. 60–80, 2019. [Online]. Available: <https://doi.org/10.1016/j.peva.2018.09.005>
- [4] L. Cardelli, M. Tribastone, M. Tschaikowski, and A. Vandin, “Comparing chemical reaction networks: A categorical and algorithmic perspective,” *Theor. Comput. Sci.*, vol. 765, pp. 47–66, 2019. [Online]. Available: <https://doi.org/10.1016/j.tcs.2017.12.018>
- [5] N. Gast, L. Bortolussi, and M. Tribastone, “Size expansions of mean field approximation: Transient and steady-state analysis,” *SIGMETRICS Perform. Evaluation Rev.*, vol. 46, no. 3, pp. 25–26, 2018. [Online]. Available: <https://doi.org/10.1145/3308897.3308909>
- [6] M. Tschaikowski and M. Tribastone, “A computational approach to steady-state convergence of fluid limits for coxian queuing networks with abandonment,” *Annals OR*, vol. 252, no. 1, pp. 101–120, 2017. [Online]. Available: <https://doi.org/10.1007/s10479-016-2193-5>
- [7] L. Cardelli, M. Tribastone, M. Tschaikowski, and A. Vandin, “Maximal aggregation of polynomial dynamical systems,” *Proc. Natl. Acad. Sci. USA*, vol. 114, no. 38, pp. 10 029–10 034, 2017. [Online]. Available: <https://doi.org/10.1073/pnas.1702697114>
- [8] M. Tschaikowski and M. Tribastone, “Spatial fluid limits for stochastic mobile networks,” *Perform. Evaluation*, vol. 109, pp. 52–76, 2017. [Online]. Available: <https://doi.org/10.1016/j.peva.2016.12.005>
- [9] L. Cardelli, A. Csikász-Nagy, N. Dalchau, M. Tribastone, and M. Tschaikowski, “Noise reduction in complex biological switches,” *Scientific Reports*, vol. 6, pp. 20 214 EP –, 02 2016. [Online]. Available: <http://dx.doi.org/10.1038/srep20214>
- [10] M. Tschaikowski and M. Tribastone, “Approximate reduction of heterogenous nonlinear models with differential hulls,” *IEEE Trans. Autom. Control.*, vol. 61, no. 4, pp. 1099–1104, 2016. [Online]. Available: <https://doi.org/10.1109/TAC.2015.2457172>
- [11] A. Das, G. V. Merrett, M. Tribastone, and B. M. Al-Hashimi, “Workload change point detection for runtime thermal management of embedded systems,” *IEEE Trans. on CAD of Integrated Circuits and Systems*, vol. 35, no. 8, pp. 1358–1371, 2016. [Online]. Available: <https://doi.org/10.1109/TCAD.2015.2504875>
- [12] M. Tschaikowski and M. Tribastone, “A unified framework for differential aggregations in Markovian process algebra,” *J. Log. Algebraic Methods Program.*, vol. 84, no. 2, pp. 238–258, 2015. [Online]. Available: <https://doi.org/10.1016/j.jlamp.2014.10.004>
- [13] L. Bortolussi, J. Hillston, and M. Tribastone, “Fluid performability analysis of nested automata models,” *Electron. Notes Theor. Comput. Sci.*, vol. 310, pp. 27–47, 2015. [Online]. Available: <https://doi.org/10.1016/j.entcs.2014.12.011>
- [14] G. Casale, M. Tribastone, and P. G. Harrison, “Blending randomness in closed queueing network models,” *Perform. Evaluation*, vol. 82, pp. 15–38, 2014. [Online]. Available: <https://doi.org/10.1016/j.peva.2014.09.001>
- [15] M. Tschaikowski and M. Tribastone, “Exact fluid lumpability in Markovian process algebra,” *Theor. Comput. Sci.*, vol. 538, pp. 140–166, 2014. [Online]. Available: <https://doi.org/10.1016/j.tcs.2013.07.029>
- [16] M. Kowal, C. Prehofer, I. Schaefer, and M. Tribastone, “Model-based development and performance analysis for evolving manufacturing systems,” *Automatisierungstechnik*, vol. 62, no. 11, pp. 794–802, 2014. [Online]. Available: <http://www.degruyter.com/view/j/auto.2014.62.issue-11/auto-2014-1098/auto-2014-1098.xml>

- [17] M. Tschaikowski and M. Tribastone, “Tackling continuous state-space explosion in a Markovian process algebra,” *Theor. Comput. Sci.*, vol. 517, pp. 1–33, 2014. [Online]. Available: <https://doi.org/10.1016/j.tcs.2013.08.016>
- [18] M. Tribastone, “A fluid model for layered queueing networks,” *IEEE Trans. Software Eng.*, vol. 39, no. 6, pp. 744–756, 2013. [Online]. Available: <https://doi.org/10.1109/TSE.2012.66>
- [19] G. Casale and M. Tribastone, “Modelling exogenous variability in cloud deployments,” *SIGMETRICS Perform. Evaluation Rev.*, vol. 40, no. 4, pp. 73–82, 2013. [Online]. Available: <https://doi.org/10.1145/2479942.2479951>
- [20] M. Tschaikowski and M. Tribastone, “Spatial fluid limits for stochastic mobile networks,” *CoRR*, vol. abs/1307.4566, 2013. [Online]. Available: <http://arxiv.org/abs/1307.4566>
- [21] M. Tribastone, J. Ding, S. Gilmore, and J. Hillston, “Fluid rewards for a stochastic process algebra,” *IEEE Trans. Software Eng.*, vol. 38, no. 4, pp. 861–874, 2012. [Online]. Available: <https://doi.org/10.1109/TSE.2011.81>
- [22] M. Tribastone, S. Gilmore, and J. Hillston, “Scalable differential analysis of process algebra models,” *IEEE Trans. Software Eng.*, vol. 38, no. 1, pp. 205–219, 2012. [Online]. Available: <https://doi.org/10.1109/TSE.2010.82>
- [23] J. Hillston, M. Tribastone, and S. Gilmore, “Stochastic process algebras: From individuals to populations,” *Comput. J.*, vol. 55, no. 7, pp. 866–881, 2012. [Online]. Available: <https://doi.org/10.1093/comjnl/bxr094>
- [24] N. Arijo, R. Heckel, M. Tribastone, and S. Gilmore, “Modular performance modelling for mobile applications (abstracts only),” *SIGMETRICS Perform. Evaluation Rev.*, vol. 39, no. 3, p. 18, 2011. [Online]. Available: <https://doi.org/10.1145/2160803.2160839>
- [25] S. Gilmore, L. Gönczy, N. Koch, P. Mayer, M. Tribastone, and D. Varró, “Non-functional properties in the model-driven development of service-oriented systems,” *Software and Systems Modeling*, vol. 10, no. 3, pp. 287–311, 2011. [Online]. Available: <https://doi.org/10.1007/s10270-010-0155-y>
- [26] M. Tribastone, “Scalable performance evaluation of computer systems,” *Softwaretechnik-Trends*, vol. 31, no. 4, 2011. [Online]. Available: http://pi.informatik.uni-siegen.de/stt/31_4/08_Sonstiges/mtribast-se2011.pdf
- [27] M. Tribastone, A. Duguid, and S. Gilmore, “The PEPA Eclipse plugin,” *SIGMETRICS Perform. Evaluation Rev.*, vol. 36, no. 4, pp. 28–33, 2009. [Online]. Available: <https://doi.org/10.1145/1530873.1530880>

Capitoli di libro

- [28] A. Vandin and M. Tribastone, “Quantitative abstractions for collective adaptive systems,” in *Formal Methods for the Quantitative Evaluation of Collective Adaptive Systems - 16th International School on Formal Methods for the Design of Computer, Communication, and Software Systems, SFM 2016, Bertinoro, Italy, June 20-24, 2016, Advanced Lectures*, ser. Lecture Notes in Computer Science, M. Bernardo, R. D. Nicola, and J. Hillston, Eds. Springer, 2016, vol. 9700, pp. 202–232. [Online]. Available: https://doi.org/10.1007/978-3-319-34096-8_7
- [29] S. Gilmore, J. Hillston, and M. Tribastone, “Service composition for collective adaptive systems,” in *Software, Services, and Systems - Essays Dedicated to Martin Wirsing on the Occasion of His Retirement from the Chair of Programming and Software Engineering*, ser. Lecture Notes in Computer Science, R. D. Nicola and R. Hennicker, Eds. Springer, 2015, vol. 8950, pp. 490–505. [Online]. Available: https://doi.org/10.1007/978-3-319-15545-6_28
- [30] L. Bulej, T. Bures, I. Gerostathopoulos, V. Horký, J. Keznikl, L. Marek, M. Tschaikowski, M. Tribastone, and P. Tuma, “Supporting performance awareness in autonomous ensembles,” in *Software Engineering for Collective Autonomic Systems - The ASCENS Approach*, ser. Lecture Notes in Computer Science, M. Wirsing, M. M. Hölzl, N. Koch, and P. Mayer, Eds. Springer, 2015, vol. 8998, pp. 291–322. [Online]. Available: https://doi.org/10.1007/978-3-319-16310-9_8

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