

Vincenzo Bonifaci

Curriculum Vitæ

Professore Associato
Dipartimento di Matematica e Fisica
Università Roma Tre
Largo San Leonardo Murialdo, 1
00146 Roma, Italia

Web:
ricerca.mat.uniroma3.it/users/vbonifaci/
Email:
vincenzo.bonifaci@uniroma3.it

Cittadinanza: Italiano
Lingue straniere: Inglese (certificazione IELTS)

Aree di Ricerca

Informatica teorica · Ottimizzazione combinatoria · Routing e scheduling · Algoritmi naturali

Abilitazione scientifica nazionale di I e di II fascia nel settore concorsuale *Sistemi di Elaborazione delle Informazioni* (09/H1)

Abilitazione scientifica nazionale di II fascia nei settori concorsuali *Informatica* (01/B1) e *Ricerca Operativa* (01/A6)

Indicatori Bibliometrici

Numero di pubblicazioni: 75
H-index Google Scholar: 27
Citazioni totali Google Scholar: 2747
ORCID: 0000-0001-9038-6901

Articoli su riviste internazionali: 33
H-index Scopus: 20
Citazioni totali Scopus: 1420
Scopus ID: 13906813700

Incarichi di Ricerca

Università Roma Tre , Roma, Italia Professore Associato	Gennaio 2020 – oggi
Istituto di Analisi dei Sistemi ed Informatica - CNR , Roma, Italia Ricercatore	Ottobre 2011 – Dicembre 2019
Università Telematica Internazionale Uninettuno , Roma, Italia Ricercatore	Maggio 2011 – Settembre 2011
Max-Planck-Institut für Informatik , Saarbrücken, Germania Postdoctoral fellow	Ottobre 2009 – Maggio 2011
Univ. dell'Aquila & Sapienza Univ. di Roma , Roma, Italia Assegnista di ricerca	Dicembre 2007 – Settembre 2009
Technische Universität Berlin , Berlino, Germania Postdoctoral fellow	Gennaio 2007 – Novembre 2007
Università degli Studi di Roma "La Sapienza" , Roma, Italia Collaboratore a contratto	Aprile 2006 – Settembre 2006 Febbraio 2005 – Luglio 2005 Giugno 2003 – Ottobre 2003

Titoli di Studio

Università degli Studi di Roma “La Sapienza”, Roma, Italia Novembre 2003 – Gennaio 2007
& **Technische Universiteit Eindhoven**, Eindhoven, Olanda

Dottorato in Ingegneria Informatica e *Ph.D.* (doppio dottorato, in cotutela di tesi)

Tutori Giorgio Ausiello (Roma), Jan Karel Lenstra (Eindhoven); copromotore Leen Stougie (Eindhoven)

Università degli Studi di Roma “La Sapienza”, Roma, Italia Novembre 1997 – Marzo 2003

Diploma di laurea quinquennale in Ingegneria Informatica, *summa cum laude*, Roma, Italia

Premi e Riconoscimenti

Best Paper Award, European Symposium on Algorithms, per il contributo [60] 2010

Premio Miglior Tesi, Capitolo Italiano EATCS, per la tesi di dottorato [71] 2007

Borsa “Christiaan Huygens”, finanziata dal ministero olandese per l’educazione 2004

Altre Attività Scientifiche

Partecipazione a comitati editoriali:

- Membro dell’editorial board di *Theoretical Computer Science*, 2021–oggi

Partecipazione a collegi di dottorato:

- Membro del collegio di Dottorato in Data Science, Sapienza Università di Roma, 2020–oggi
- Membro esterno del collegio di Dottorato in Ingegneria Informatica, Sapienza Università di Roma, 2017–2019

Partecipazione a comitati di programma di convegni internazionali:

- International Joint Conference on Artificial Intelligence (IJCAI), 2019;
- International Conference on Algorithms and Complexity (CIAC), 2019;
- Symposium on Experimental Algorithms (SEA), 2018;
- International Symposium on Combinatorial Optimization (ISCO), 2018;
- International Conference on Algorithms and Complexity (CIAC), 2017;
- Euromicro Conference on Real-Time Systems (ECRTS), 2016;
- Fun with Algorithms (FUN), 2016;
- IEEE Real-Time Systems Symposium (RTSS), 2015;
- Symposium on Experimental Algorithms (SEA), 2015;
- International Conference on Algorithms and Complexity (CIAC), 2015;
- Symposium on Experimental Algorithms (SEA), 2013 (*co-chair*);
- Workshop on Approximation and Online Algorithms (WAOA), 2013;
- Models and Algorithms for Planning and Scheduling Problems (MAPSP), 2013;
- Computing: the Australasian Theory Symposium (CATS), 2012.

Eventi organizzati o co-organizzati:

- IEEE Real-Time Systems Symposium (RTSS), Roma, Italia, 2–5 Dicembre 2014;
- Symposium on Experimental Algorithms (SEA), Roma, Italia, 5–7 Giugno 2013;
- Workshop on Internet and Network Economics (WINE), Roma, Italia, 14–18 Dicembre 2009;
- PhD School “Hot Topics in Network Algorithms”, Bertinoro, Italia, 4–8 Maggio 2008;
- Gara di Programmazione ACM-Sapienza, Roma, Italia, 20 Maggio 2015;
- Gara di Programmazione ACM-Sapienza, Roma, Italia, 17 Dicembre 2013;

Partecipazione a progetti di ricerca:

- OPTIMA – Ottimizzazione, Matematica Discreta e Applicazioni per la Società e l’Industria (CNR DIT.AD021.027.001)
- COOT – Controllo e Ottimizzazione di Sistemi Complessi (CNR ICT.P11.005.001)
- ARRIVAL – Algorithms for Robust and Online Railway Optimization (EC FET IST FP6-021235-2)
- GRAAL – Graphs and Algorithms in Communication Networks (EU COST Action TIST 293)
- ProFIT – Fundamental Algorithms for Combinatorial Optimization Problems (European Regional Development Fund ProFIT)
- ALCOM-FT – Algorithms and Complexity – Future Technologies (EC FET IST-1999-14186)
- MAINSTREAM – Algorithms for Massive Information Structures and Data Streams (MIUR PRIN)
- ALGONEXT – Algorithms for the Next Generation Internet and Web (MIUR PRIN)

Peer-reviewer per le riviste: ACM Transactions on Algorithms, Algorithmica, Theoretical Computer Science, J. Computer and System Sciences, IEEE Trans. on Parallel and Distributed Systems, Distributed Computing, Mathematical Programming, Mathematics of Operations Research, J. of Scheduling, Discrete Applied Mathematics

Peer-reviewer per i convegni: STOC, FOCS, SODA, ICALP, ESA, STACS, ITCS, APPROX, WINE, SPAA, PODC, PODS, IJCAI

Responsabilità Didattiche

Corso di Machine Learning , Univ. Roma Tre Docente	2021
Corso di Ottimizzazione Combinatoria , Univ. Roma Tre Docente	2020,2022
Corso di Teoria dell’Informazione , Univ. Roma Tre Docente	2020-22
Corso di Introduzione alla Programmazione in Python , SSAS Sapienza Docente (attività seminariale)	2018-2019
Corso di Seminars in Social Networks & Markets , Sapienza Univ. di Roma Docente titolare (in convenzione ente)	2016-2017
Corso di Seminars in Computer Networks , Sapienza Univ. di Roma Docente titolare (in convenzione ente)	2013-2015
Corso di Competition and Cooperation in Multi-Agent Systems , Sapienza Univ. di Roma Docente	2012
Corso di Algorithmic Game Theory , MPII Saarbrücken Docente	2010

Corso di **Fondamenti di Informatica II**, Sapienza Univ. di Roma
Esercitatore

2011–2012

Corso di **Informatica Teorica**, Sapienza Univ. di Roma
Esercitatore

2004–2008, 2011

Partecipazione a Società Scientifiche

- Membro EATCS, ACM, SIAM, IEEE (Senior member), MOS

Publicazioni

Riviste Internazionali

- [1] L. Allulli, G. Ausiello, V. Bonifaci, and L. Laura. On the power of lookahead in on-line server routing problems. *Theoretical Computer Science*, 408(2–3):116–128, 2008.
- [2] G. Ausiello, V. Bonifaci, and L. Laura. The on-line asymmetric traveling salesman problem. *Journal of Discrete Algorithms*, 6(2):290–298, 2008.
- [3] G. Ausiello, V. Bonifaci, and L. Laura. The on-line prize-collecting traveling salesman problem. *Information Processing Letters*, 107(6):199–204, 2008.
- [4] S. K. Baruah, V. Bonifaci, R. Bruni, and A. Marchetti-Spaccamela. ILP models for the allocation of recurrent workloads upon heterogeneous multiprocessors. *Journal of Scheduling*, to appear. doi:10.1007/s10951-018-0593-x
- [5] S. K. Baruah, V. Bonifaci, G. D’Angelo, H. Li, A. Marchetti-Spaccamela, N. Megow, and L. Stougie. Scheduling real-time mixed-criticality jobs. *IEEE Transactions on Computers*, 61(8):1140–1152, 2011.
- [6] S. K. Baruah, V. Bonifaci, G. D’Angelo, H. Li, A. Marchetti-Spaccamela, S. van der Ster, and L. Stougie. Preemptive uniprocessor scheduling of mixed-criticality sporadic task systems. *J. ACM*, 62(2):14, 2015.
- [7] S. K. Baruah, V. Bonifaci, A. Marchetti-Spaccamela, and S. Stiller. Improved multiprocessor global schedulability analysis. *Real-Time Systems*, 46(1):3–24, 2010.
- [8] R. Becker, V. Bonifaci, A. Karrenbauer, P. Kolev, and K. Mehlhorn. Two results on slime mold computations. *Theoretical Computer Science*, to appear. doi:10.1016/j.tcs.2018.08.027
- [9] A. Berger, V. Bonifaci, F. Grandoni, and G. Schäfer. Budgeted matching and budgeted matroid intersection via the gasoline puzzle. *Mathematical Programming*, 128(1-2):355–372, 2011.
- [10] V. Bonifaci. An adversarial queueing model for online server routing. *Theoretical Computer Science*, 381(1–3):280–287, 2007.
- [11] V. Bonifaci. Physarum can compute shortest paths: A short proof. *Information Processing Letters*, 113(1–2):4–7, 2013.
- [12] V. Bonifaci. A revised model of fluid transport optimization in *Physarum polycephalum*. *Journal of Mathematical Biology*, 74:567–581, 2017.
- [13] V. Bonifaci, H.-L. Chan, A. Marchetti-Spaccamela, and N. Megow. Algorithms and complexity for periodic real-time scheduling. *ACM Transactions on Algorithms*, 9(1):6, 2012.
- [14] V. Bonifaci, C. Demetrescu, I. Finocchi, and L. Laura. A Java-based system for building animated presentations over the Web. *Science of Computer Programming*, 53(1):37–49, 2004.

- [15] V. Bonifaci, U. Di Iorio, and L. Laura. The complexity of uniform Nash equilibria and related regular subgraph problems. *Theoretical Computer Science*, 401(1–3):144–152, 2008.
- [16] V. Bonifaci, T. Harks, and G. Schäfer. Stackelberg routing in arbitrary networks. *Mathematics of Operations Research*, 35(2):1–17, 2010.
- [17] V. Bonifaci, P. Korteweg, A. Marchetti-Spaccamela, and L. Stougie. An approximation algorithm for the wireless gathering problem. *Operations Research Letters*, 36(5):605–608, 2008.
- [18] V. Bonifaci, P. Korteweg, A. Marchetti-Spaccamela, and L. Stougie. The distributed wireless gathering problem. *Theoretical Computer Science*, 412(8–10):633–641, 2011.
- [19] V. Bonifaci, P. Korteweg, A. Marchetti-Spaccamela, and L. Stougie. Minimizing flow time in the wireless gathering problem. *ACM Transactions on Algorithms*, 7(3):33, 2011.
- [20] V. Bonifaci and A. Marchetti-Spaccamela. Feasibility analysis of sporadic real-time multiprocessor task systems. *Algorithmica*, 63(4):763–780, 2012.
- [21] V. Bonifaci, A. Marchetti-Spaccamela, and S. Stiller. A constant-approximate feasibility test for multiprocessor real-time scheduling. *Algorithmica*, 62(3–4):1034–1049, 2012.
- [22] V. Bonifaci, K. Mehlhorn, and G. Varma. Physarum can compute shortest paths. *Journal of Theoretical Biology*, 309:121–133, 2012.
- [23] V. Bonifaci and L. Stougie. Online k -server routing problems. *Theory of Computing Systems*, 45(3):470–485, 2009.
- [24] V. Bonifaci, A. Wiese, S. K. Baruah, A. Marchetti-Spaccamela, S. Stiller, and L. Stougie. A generalized parallel task model for recurrent real-time processes. *ACM Transactions on Parallel Computing*, To appear.
- [25] R. Davis, M. Bertogna, and V. Bonifaci. On the compatibility of exact schedulability tests for global fixed priority pre-emptive scheduling with audsley’s optimal priority assignment algorithm. *Real-Time Systems*, pages 1–10, 2015.
- [26] A. Melani, M. Bertogna, V. Bonifaci, A. Marchetti-Spaccamela, and G. Buttazzo. Schedulability analysis of conditional parallel task graphs in multicore systems. *IEEE Transactions on Computers*, 66(2):339–353, 2017.
- [27] A. Melani, M. Bertogna, R. I. Davis, V. Bonifaci, A. Marchetti-Spaccamela, and G. Buttazzo. Exact response time analysis for fixed priority memory-processor co-scheduling. *IEEE Transactions on Computers*, 66(4):631–646, 2017.
- [28] A. Wiese, V. Bonifaci, and S. Baruah. Partitioned EDF scheduling on a few types of unrelated multiprocessors. *Real-Time Systems*, 49(2):219–238, 2013.

Contributi a Volumi Internazionali

- [29] G. Ausiello, V. Bonifaci, and B. Escoffier. Complexity and approximation in reoptimization. In S. B. Cooper and A. Sorbi, editors, *Computability in Context: Computation and Logic in the Real World*, chapter 4, pages 101–129. World Scientific, 2011.
- [30] G. Ausiello, V. Bonifaci, S. Leonardi, and A. Marchetti-Spaccamela. Prize-collecting traveling salesman and related problems. In T. F. Gonzalez, editor, *Handbook of Approximation Algorithms and Metaheuristics*, chapter 40. CRC Press, 2007.
- [31] V. Bonifaci, R. Klasing, P. Korteweg, L. Stougie, and A. Marchetti-Spaccamela. Data gathering in wireless networks. In A. Koster and X. Muñoz, editors, *Graphs and Algorithms in Communication Networks*, chapter 14, pages 357–377. Springer, 2009.
- [32] V. Bonifaci and S. Leonardi. Algorithms for auctions and games. In G. Ausiello and R. Petreschi, editors, *The Power of Algorithms*, chapter 9, pages 207–234. Springer, 2013.

Atti di Conferenze Internazionali

- [33] L. Allulli, G. Ausiello, V. Bonifaci, and L. Laura. On-line algorithms, real time, the virtue of laziness, and the power of clairvoyance. In *Proc. 3rd Conf. on Theory and Applications of Models of Computation*, pages 1–20, 2006.
- [34] G. Ausiello, V. Bonifaci, and L. Laura. On explorers, chasers and cameramen. In *Proc. 3rd Conf. on Fun with Algorithms*, pages 287–294, 2004.
- [35] G. Ausiello, V. Bonifaci, and L. Laura. The on-line asymmetric traveling salesman problem. In *Proc. 9th Workshop on Algorithms and Data Structures*, pages 306–317, 2005.
- [36] S. Baruah, V. Bonifaci, and A. Marchetti-Spaccamela. The global EDF scheduling of systems of conditional sporadic DAG tasks. In *27th Euromicro Conference on Real-Time Systems, ECRTS 2015, Lund, Sweden, July 8-10, 2015*, pages 222–231, 2015.
- [37] S. Baruah, V. Bonifaci, A. Marchetti-Spaccamela, and V. Verdugo. A scheduling model inspired by control theory. In *Proceedings of the 25th International Conference on Real-Time Networks and Systems*, pages 78–87, 2017.
- [38] S. K. Baruah, V. Bonifaci, R. Bruni, and A. Marchetti-Spaccamela. ILP-based approaches to partitioning recurrent workloads upon heterogeneous multiprocessors. In *28th Euromicro Conference on Real-Time Systems*, pages 215–225, 2016.
- [39] S. K. Baruah, V. Bonifaci, G. D’Angelo, H. Li, A. Marchetti-Spaccamela, N. Megow, and L. Stougie. Scheduling real-time mixed-criticality jobs. In *Proc. 35th Symp. on Mathematical Foundations of Computer Science*, pages 90–101, 2010.
- [40] S. K. Baruah, V. Bonifaci, G. D’Angelo, H. Li, A. Marchetti-Spaccamela, S. van der Ster, and L. Stougie. The preemptive uniprocessor scheduling of mixed-criticality implicit-deadline sporadic task systems. In *Proc. 24th Euromicro Conference on Real-Time Systems*, pages 145–154, 2012.
- [41] S. K. Baruah, V. Bonifaci, G. D’Angelo, A. Marchetti-Spaccamela, S. van der Ster, and L. Stougie. Mixed-criticality scheduling of sporadic task systems. In *Proc. 19th European Symp. on Algorithms*, pages 555–566, 2011.
- [42] S. K. Baruah, V. Bonifaci, A. Marchetti-Spaccamela, and S. Stiller. Implementation of a speedup-optimal global EDF schedulability test. In *Proc. 21st Euromicro Conf. on Real-Time Systems*, pages 259–268, 2009.
- [43] S. K. Baruah, V. Bonifaci, A. Marchetti-Spaccamela, L. Stougie, and A. Wiese. A generalized parallel task model for recurrent real-time processes. In *Proc. 33rd IEEE Real-Time Systems Symposium*, pages 63–72, 2012.
- [44] L. Becchetti, V. Bonifaci, M. Dirnberger, A. Karrenbauer, and K. Mehlhorn. Physarum can compute shortest paths: Convergence proofs and complexity bounds. In *Proc. 40th Int. Colloquium on Automata, Languages, and Programming*, pages 472–483, 2013.
- [45] L. Becchetti, V. Bonifaci, and E. Natale. Pooling or sampling: Collective dynamics for electrical flow estimation. In *Proc. of the 17th International Conference on Autonomous Agents and MultiAgent Systems, AAMAS 2018*, pages 1576–1584, 2018.
- [46] A. Berger, V. Bonifaci, F. Grandoni, and G. Schäfer. Budgeted matching and budgeted matroid intersection via the gasoline puzzle. In *Proc. 13th Integer Programming and Combinatorial Optimization Conf.*, pages 273–287, 2008.
- [47] V. Bonifaci. On the convergence time of a natural dynamics for linear programming. In *28th International Symposium on Algorithms and Computation, ISAAC 2017, December 9-12, 2017, Phuket, Thailand*, pages 17:1–17:12, 2017.

- [48] V. Bonifaci, B. Brandenburg, G. D'Angelo, and A. Marchetti-Spaccamela. Multiprocessor real-time scheduling with hierarchical processor affinities. In *28th Euromicro Conference on Real-Time Systems*, pages 237–247, 2016.
- [49] V. Bonifaci, H.-L. Chan, A. Marchetti-Spaccamela, and N. Megow. Algorithms and complexity for periodic real-time scheduling. In *Proc. 21st Symp. on Discrete Algorithms*, pages 1350–1359, 2010.
- [50] V. Bonifaci, G. D'Angelo, and A. Marchetti-Spaccamela. Algorithms for hierarchical and semi-partitioned parallel scheduling. In *IEEE International Parallel and Distributed Processing Symposium*, pages 738–747, 2017.
- [51] V. Bonifaci, C. Demetrescu, I. Finocchi, G. F. Italiano, and L. Laura. Portraying algorithms with Leonardo Web. In *Proc. 6th Conf. on Web Information Systems Engineering, WISE Workshops*, pages 73–83, 2005.
- [52] V. Bonifaci, C. Demetrescu, I. Finocchi, and L. Laura. Visual editing of animated algorithms: the Leonardo Web builder. In *Proc. 8th Working Conf. on Advanced Visual Interfaces*, pages 476–479, 2006.
- [53] V. Bonifaci, U. Di Iorio, and L. Laura. New results on the complexity of uniformly mixed Nash equilibria. In *Proc. 1st Workshop on Internet and Network Economics*, pages 1023–1032, 2005.
- [54] V. Bonifaci, U. Di Iorio, and L. Laura. On the complexity of uniformly mixed Nash equilibria and related regular subgraph problems. In *Proc. 15th Symp. on Fundamentals of Computation Theory*, pages 197–208, 2005.
- [55] V. Bonifaci, T. Harks, and G. Schäfer. Stackelberg routing in arbitrary networks. In *Proc. 4th Workshop on Internet and Network Economics*, pages 239–250, 2008.
- [56] V. Bonifaci, P. Korteweg, A. Marchetti-Spaccamela, and L. Stougie. An approximation algorithm for the wireless gathering problem. In *Proc. 10th Scandinavian Workshop on Algorithm Theory*, pages 328–338, 2006.
- [57] V. Bonifaci, P. Korteweg, A. Marchetti-Spaccamela, and L. Stougie. The distributed wireless gathering problem. In *Proc. 4th Conf. on Algorithmic Aspects of Information Management*, pages 72–83, 2008.
- [58] V. Bonifaci, P. Korteweg, A. Marchetti-Spaccamela, and L. Stougie. Minimizing average flow time in sensor data gathering. In *Proc. 4th Workshop on Algorithmic Aspects of Wireless Sensor Networks*, pages 18–29, 2008.
- [59] V. Bonifaci, P. Korteweg, A. Marchetti-Spaccamela, and L. Stougie. Minimizing flow time in the wireless gathering problem. In *Proc. 25th Symp. on Theoretical Aspects of Computer Science*, pages 109–120, 2008.
- [60] V. Bonifaci and A. Marchetti-Spaccamela. Feasibility analysis of sporadic real-time multiprocessor task systems. In *Proc. 18th European Symp. on Algorithms*, pages 230–241, 2010.
- [61] V. Bonifaci, A. Marchetti-Spaccamela, N. Megow, and A. Wiese. Polynomial-time exact schedulability tests for harmonic real-time tasks. In *Proc. IEEE Real-Time Systems Symp.*, pages 236–245, 2013.
- [62] V. Bonifaci, A. Marchetti-Spaccamela, and S. Stiller. A constant-approximate feasibility test for multiprocessor real-time scheduling. In *Proc. 16th European Symp. on Algorithms*, pages 210–221, 2008.
- [63] V. Bonifaci, A. Marchetti-Spaccamela, S. Stiller, and A. Wiese. Feasibility analysis in the sporadic DAG model. In *Proc. 25th Euromicro Conf. on Real-Time Systems*, pages 225–233, 2013.

- [64] V. Bonifaci, K. Mehlhorn, and G. Varma. Physarum can compute shortest paths. In *Proc. 23rd Symp. on Discrete Algorithms*, 2012.
- [65] V. Bonifaci, M. Salek, and G. Schäfer. On the efficiency of restricted tolls in network routing games. In *Proc. 4th Symp. on Algorithmic Game Theory*, pages 302–313, 2011.
- [66] V. Bonifaci and L. Stougie. Online k -server routing problems. In *Proc. 4th Workshop on Approximation and Online Algorithms*, pages 83–94, 2007.
- [67] A. Kesselman, S. Leonardi, and V. Bonifaci. Game-theoretic analysis of Internet switching with selfish users. In *Proc. 1st Workshop on Internet and Network Economics*, pages 236–245, 2005.
- [68] A. Melani, M. Bertogna, V. Bonifaci, A. Marchetti-Spaccamela, and G. C. Buttazzo. Memory-processor co-scheduling in fixed priority systems. In *Proceedings of the 23rd International Conference on Real Time and Networks Systems, RTNS 2015, Lille, France, November 4-6, 2015*, pages 87–96, 2015.
- [69] A. Melani, M. Bertogna, V. Bonifaci, A. Marchetti-Spaccamela, and G. C. Buttazzo. Response-time analysis of conditional DAG tasks in multiprocessor systems. In *27th Euromicro Conference on Real-Time Systems, ECRTS 2015, Lund, Sweden, July 8-10, 2015*, pages 211–221, 2015.

Tesi di Laurea e di Dottorato

- [70] V. Bonifaci. Algoritmi on-line per sistemi metrici di servizi (in Italian). Master’s thesis, University of Rome “La Sapienza”, 2003.
- [71] V. Bonifaci. *Models and Algorithms for Online Server Routing*. PhD thesis, University of Rome “La Sapienza” and Technical University Eindhoven, 2007. Available online at <http://www.iasi.cnr.it/~vbonifaci/pub/phdthesis.pdf>.

Seminari presso Università e Centri di Ricerca

Istituto di Analisi dei Sistemi ed Informatica , Roma, Italia Introduzione a modelli e metodi di regressione e di classificazione	Ottobre 2020
Università Roma Tre , Roma, Italia Laplacian-based optimization algorithms	Novembre 2018
Università degli Studi di Padova , Padova, Italia On the convergence time of a natural dynamics for linear programming	Febbraio 2018
Scuola Superiore di Studi Avanzati Sapienza , Roma, Italia Algoritmi ispirati dai meccanismi biologici	Maggio 2017
Università di Tor Vergata , Roma, Italia On the convergence time of a natural dynamics for linear programming	Febbraio 2017
Max Planck Institute for Informatics , Saarbrücken, Germania On the convergence time of a natural dynamics for linear programming	Febbraio 2017
Technical University of Munich , Monaco, Germania Algorithms for hierarchical and semi-partitioned parallel scheduling	Giugno 2016
Univ. North Carolina at Chapel Hill , Chapel Hill, Stati Uniti Deadline scheduling in the DAG task model	Febbraio 2015
École Polytechnique Fédérale de Lausanne , Losanna, Svizzera Physarum can compute shortest paths	Ottobre 2014
Accademia dei Lincei , Roma, Italia Teoria dei giochi e calcoli strategici: dalla guerra fredda alle aste on-line	Maggio 2014
Università di Tor Vergata , Roma, Italia Deadline scheduling in the DAG task model	Settembre 2013

University of Lund , Lund, Svezia Physarum can compute shortest paths: Convergence proofs and complexity bounds	Settembre 2013
Dalle Molle Institute for Artificial Intelligence , Lugano, Svizzera Physarum can compute shortest paths	Gennaio 2013
Istituto di Analisi dei Sistemi ed Informatica, CNR , Roma, Italia Physarum can compute shortest paths	Novembre 2011
Sapienza Università di Roma , Italia Physarum can compute shortest paths	Novembre 2011
Istituto di Analisi dei Sistemi ed Informatica, CNR , Roma, Italia Budgeted matching via the gasoline puzzle	Luglio 2008
Sapienza Università di Roma , Italia Budgeted matching and budgeted matroid intersection	Marzo 2008
Technical University of Eindhoven , Olanda Stackelberg routing in arbitrary networks	Dicembre 2007
Technical University of Berlin , Germania Adversarial queueing theory and online server routing	Maggio 2007
University of Aarhus , Danimarca The complexity of uniform Nash equilibria	Aprile 2007
Istituto di Analisi dei Sistemi ed Informatica, CNR , Roma, Italia Online server routing problems: models and algorithms	Dicembre 2006
University of Maastricht , Olanda The online asymmetric traveling salesman problem	Novembre 2005
Technical University of Eindhoven , Olanda The online asymmetric traveling salesman problem	Aprile 2005

Interventi a Conferenze Internazionali

Complexity, Algorithms, Automata and Logic Meet , Chennai, India Collective dynamics for electrical flow estimation (<i>invited</i>)	Gennaio 2019
Emergent Algorithms and Network Dynamics , Parigi, Francia The network dynamics of Physarum polycephalum (<i>invited plenary</i>)	Ottobre 2018
Flexible Network Design , Washington DC, USA On the convergence time of a natural dynamics for linear programming	Maggio 2018
Int. Symposium on Algorithms and Computation , Phuket, Thailandia On the convergence time of a natural dynamics for linear programming	Dicembre 2017
NETWORKS Conference , Amsterdam, Olanda Parallel scheduling with hierarchical processor affinities (<i>invited</i>)	Giugno 2017
Int. Symposium on Mathematical Programming , Pittsburgh, Stati Uniti Deadline scheduling of conditional DAG tasks	Luglio 2015
Euromicro Conference on Real-Time Systems , Lund, Svezia The global EDF scheduling of systems of conditional sporadic DAG tasks	Luglio 2015
Models and Algorithms for Planning and Scheduling Problems , La Roche-en-Ardenne, Belgio The global EDF scheduling of systems of conditional sporadic DAG tasks	Giugno 2015
Workshop on Flexible Network Design , Lugano, Svizzera Open Problems in Natural Network Design	Agosto 2014
European Conf. on Mathematical and Theoretical Biology , Gotheburg, Svezia Physarum can compute shortest paths	Giugno 2014

IEEE Real-Time Systems Symposium , Vancouver, Canada	Dicembre 2013
Polynomial-Time Exact Schedulability Tests for Harmonic Real-Time Tasks	
Models and Algorithms for Planning and Scheduling Problems , Pont-à-Mousson, Francia	Giugno 2013
Deadline scheduling of jobs and tasks in the sporadic DAG model	
Int. Symposium on Mathematical Programming , Berlino, Germania	Agosto 2012
Physarum can compute shortest paths	
Workshop on Algorithmic Challenges in Real-Time Systems , Berlino, Germania	Febbraio 2012
Scheduling a few different types of unrelated machines	
Symposium on Discrete Algorithms , Kyoto, Giappone	Gennaio 2012
Physarum can compute shortest paths	
European Symposium on Algorithms , Saarbrücken, Germania	Settembre 2011
Mixed-criticality scheduling of sporadic task systems	
Workshop on Graph Algorithms and Applications , Zurigo, Svizzera	Luglio 2011
Faster algorithms for rounding fractional spanning trees	
Models and Algorithms for Planning and Scheduling Problems , Nymburk, Repubblica Ceca	Giugno 2011
Feasibility analysis of sporadic real-time multiprocessor task systems (<i>plenary</i>)	
European Symposium on Algorithms , Liverpool, Regno Unito	Settembre 2010
Feasibility analysis of sporadic real-time multiprocessor task systems (<i>award talk</i>)	
Symposium on Discrete Algorithms , Austin, TX, Stati Uniti	Gennaio 2010
Algorithms and complexity for periodic real-time scheduling	
Int. Symposium on Mathematical Programming , Chicago, Stati Uniti	Agosto 2009
Stackelberg routing in arbitrary networks	
Euromicro Conf. on Real-Time Systems , Dublino, Irlanda	Luglio 2009
Implementation of a speedup-optimal global EDF schedulability test	
Int. Network Optimization Conference , Pisa, Italia	Aprile 2009
Routing in a partially selfish network	
Symposium on Theoretical Aspects of Computer Science , Bordeaux, Francia	Febbraio 2008
Minimizing flow time in the wireless gathering problem	
Italian Conf. on Theoretical Computer Science , Roma, Italia	Ottobre 2007
Models and algorithms for online server routing (<i>award talk</i>)	
Workshop on Approximation and Online Algorithms , Zurigo, Svizzera	Settembre 2006
Online k -server routing problems	
Workshop on Internet and Network Economics , Hong Kong, Cina	Dicembre 2005
Game-theoretic analysis of Internet switching with selfish users	
Workshop on Internet and Network Economics , Hong Kong, Cina	Dicembre 2005
New results on the complexity of uniformly mixed Nash equilibria	
Workshop on Algorithms and Data Structures , Waterloo, Canada	Agosto 2005
The online asymmetric traveling salesman problem	
Workshop on On-Line Algorithms , Rungsted Kyst, Danimarca	Luglio 2004
Algorithms for the on-line quota traveling salesman problem	
Conference on Fun With Algorithms , Isola d'Elba, Italia	Maggio 2004
On explorers, chasers and cameramen	

Roma, 29 aprile 2022