Giuseppe Prencipe

Curriculum Vitae

Current Position

- Associate Professor, Università di Pisa, Dipartimento di Informatica.

Degrees

- 2002, PhD in Computer Science, Università di Pisa, Dip. di Informatica.
- 1995, Laurea in Computer Science, Università di Pisa, Dip. di Informatica.

Employment History

- Dec 2015 – Associate Professor, Università di Pisa, Dip. di Informatica.
- Dec 2007 – Dec 2015 Researcher, Università di Pisa, Dip. di Informatica.
- Aug 2006 – Mar 2010, part-time contract with Metaware s.p.a. on the European Project *MUSING: Paving The Way To The New Generation Business Intelligence* (Sixth Framework Programme).
- Nov 2002–Jan 2006, Postdoctoral Fellow, Università di Pisa, Dip. di Informatica.

Technology Transfer

- 2017 – co-founder of *Tennis Commander srl*, a start-up, spin-off of Università di Pisa, focused on *sport analytics*, in particular for tennis, with the use of Machine Learning.

Research Grants

- 2015 –, HOPE Project (Housing in Pisa for social inclusion and engagement in Elderly), POR FESR 2014-2020, Obiettivo Investimenti a favore della crescita e dell'occupazione, funded by Tuscany, Progetti di Innovazione Urbana (PIU) .
- 2014, TNA project *Distributed Control in Mobile Robotics Systems: Theoretical Developments and Applications*, in Visionair Project (EU FP7, n. 262044), at 3DICC (STZAKI) labs, Budapest.
- Prin (2013 – 2016), Progetti di Rilevante Interesse Nazionale (PRIN), *ARS TechnoMedia (Algorithms for Techno-Mediated Social Networks).*
- Prin (2010 – 2012), Progetti di Rilevante Interesse Nazionale (PRIN), *The Mad Web: Models, Algorithms and Data structures for the Web and other behavioural networks.*
- EU-FP6 (2006 – 2010), European Project (Sixth Framework Programme): *MUSING: Paving The Way To The New Generation Business Intelligence.*
- Prin (2004–2006), Progetti di Rilevante Interesse Nazionale (PRIN), *Project ALGO-NEXT Algorithms for the Next Generation Internet and Web: Methodologies, Design and Applications.*

- Prin (2002–2004), Progetti di Rilevante Interesse Nazionale (PRIN), *ALINWEB: Algorithmics for Internet and the Web.*
- 2001–2003, COFIN, *Tradizioni e Testi. Edizioni, studi e strumenti per la Biblioteca Italiana Digitale.*
- 1997–1998, NATO project: *Mathematical Models and Algorithms for Coarse-Grained Parallel Computation* (CRG 971467).

Scientific Activities

The research activity focuses mostly on the study of mobile and distributed systems. One area of research is the design and analysis of distributed algorithms to control a set of autonomous mobile robots, with the goal of understanding the relationship between the power and capabilities of the robots and the ability of the team to accomplish a given task [1]. One of the outcomes of this work has been the definition of a novel computational model to describe a distributed system populated by a set of mobile robots, departing from previous proposals in the total asynchrony of the interactions of the robots. Other results concerned the design of algorithms for the proposed model, that allowed the team of the robots to solve tasks that are common in robotics [2, 3, 4, 13, 49, 57, 59]. This model has been adopted in several successive works developed on this topic by a number of teams of researchers internationally.

Also a 3D computer simulator has been developed as a result of the amount of work done on these topics, Sycamore, designed to effectively simulate interactions between robots. Also, he has been the PI of a EU TNA project (TransNational Action), in the context of the EU project Vision-Air (*Distributed Control in Mobile Robotics Systems: Theoretical Developments and Applications*, in Visionair Project, EU FP7, n. 262044, at 3DICC STZAKI labs, Budapest), where Sycamore has been integrated in the 3D virtual collaboration platform VIRCA (VIRtual Collaboration Arena2). Finally, all the research done in over 10 years on these topics resulted in co-founding the international *Workshop and Research School on Moving and Computing*, active since 2010, fully focused to the study of distributed systems ad algorithms for the decentralized control of a population of autonomous mobile units.

Lately, the research focus in this field shifted towards the study of *programmable matter*. "Programmable matter" is a term originally coined by Toffoli and Margolus in 1991 [14], and it is typically viewed as a very large number of very small (possibly nano-level) computational particles that are programmed to collectively perform some global task by means of local interactions. Since its first introduction, there has been a significant amount of work on programmable matter across multiple disciplines; in particular, there is a strong emphasis on the parallel and distributed nature of the problems. Recently, the activity research shifted towards the investigations of this new and interesting topic [23, 26].

A second research field is related to security issues in networked environments where mobile agents compute. The interest is in the presence of harmful hosts, called black holes: sites that destroy any agent that might visit them without leaving any observable trace. The focus is on designing efficient strategies for the agents to locate and isolate harmful hosts. Recently, the problem of addressing a wider scenario (the so called "dangerous networks") is being tackled, where security issues that are dynamic are studied [12, 14, 44, 47, 48, 50, 54].

Another strand of research is devoted to the study of fault-tolerant routing strategies in networks using shortest-path routing tables, where a single link failure is enough to interrupt the message transmission. The on-line recomputation of an alternative path is usually rather expensive and causes long delays. The focus has been on the design of efficient distributed algorithms to

precompute, for each link in the tree, a single non-tree link (the swap edge) able to reconnect the network should the first fail [15, 31, 34, 35, 40, 41, 42].

Scholarly and Professional Activities (short list)

Invited Talks

- *Pattern Formation by Autonomous Mobile Robots*, MoRoVer, 2017.
- *The Power of Lights for Autonomous Mobile Robots*, 5^{th} Workshop on Moving and Computing, 2015.
- *Autonomous Mobile Robots: A Distributed Computing Perspective*, 9^{th} ALGOSENSORS, 2013.

Chair and Organization of International Conferences

- 2018, Organizing committee of the 8^{th} *International Conference on FUN With Algorithms* (FUN 2018).
- 2017, Scientific and Organizing committee of the 7^{nd} *Research Meeting and School on Distributed Computing by Mobile Robots*, 5-9 Giugno 2017, Ischia, Italia.
- 2016, Organizing committee of the 8^{th} *International Conference on FUN With Algorithms* (FUN 2016).
- 2014, Organizing committee of the 7^{th} *International Conference on FUN With Algorithms* (FUN 2014).
- 2013, Scientific and Organizing committee of the 2^{nd} *Research Meeting and School on Distributed Computing by Mobile Robots*, 4-5 Luglio 2013, Ischia, Italia.
- 2013, Organizing committee of the workshop *Knowledge acceleration and ICT in Tuscany*, 20 Settembre 2013, Pisa.
- 2010, Scientific and Organizing committee of the 1^{st} *Research Meeting and School on Distributed Computing by Mobile Robots*, 15-18 Agosto 2010, Carleton University, Ottawa, Canada.
- 2008, Organizing committee of the 19^{th} Annual Symposium on Combinatorial Pattern Matching (CPM 2008).
- 2007, Co-chair del 14^{th} *Colloquium on Structural Information and Communication Complexity* (SIROCCO 2007, LNCS 4474).
- 2007, Organizer of the 4^{th} *International Conference on FUN With Algorithms* (FUN 2007, LNCS 4475).
- 2005, Organizer of the 9^{th} *International Conference on Principles of Distributed Systems* (OPODIS 2005, LNCS 3974).
- 2002, Organizing committee of the 2^{nd} IFIP International Conference on Theoretical Computer Science (TCS@2002).

Member of Program Committees of International Conferences

- 2014, 7^{th} *International Conference on FUN With Algorithms* (FUN 2014).
- 2013, 9^{th} *International Symposium on Algorithms and Experiments for Sensor Systems, Wireless Networks and Distributed Robotics* (ALGOSENSORS 2013).
- 2012, 16^{th} *International Conference on Principles of Distributed Systems* (OPODIS 2012).
- 2010, 14^{th} *International Conference on Principles of Distributed Systems* (OPODIS 2010).
- 2007, 14^{th} *Colloquium on Structural Information and Communication Complexity* (SIROCCO 2007).
- 2006, 10^{th} *International Conference on Principles of Distributed Systems* (OPODIS 2006).
- 2006, 8^{th} *International Symposium on Stabilization, Safety, and Security of Distributed Systems* (SSS 2006).
- 2006, 13^{th} *Colloquium on Structural Information and Communication Complexity* (SIROCCO 2006).
- 2005, 9^{th} *International Conference on Principles of Distributed Systems* (OPODIS 2005).
- 2004, *Europar 2004* (per il topic *Distributed Systems and Algorithms*).
- 2004, *Third International Conference on FUN With Algorithms* (FUN 2004).

Member of Steering Committee of International Conferences

- 2013 – current, *International Conference on Principles of Distributed Systems.*
- 2006 – 2010, *Colloquium on Structural Information and Communication Complexity.*

Member of Evaluation Committees

Served as an expert reviewer on robotics-related projects for the following agencies:

- 2017, Polish National Science Center.
- 2017, Swiss National Science Foundation.
- 2010 and 2011, ISF (Israel Science Foundation).
- 2008, ANR (Agence Nationale de la Recherche, Francia), for the project *Contenus et Interactions.*
- 2007, ANR (Agence Nationale de la Recherche, Francia), for the *Programme Systèmes Interactifs et Robotique.*

Teaching

- *Programming for Data Science* (Master in Data Science and Business Informatics), Università degli Studi di Pisa, 2017–current.
- *Parallel and Distributed Algorithms* (Master in Computer Science and Networking), Università degli Studi di Pisa, 2011–current.
- *Operating Systems (Lab.)* (Laurea in Computer Science), Università degli Studi di Pisa, 2014.
- *Algorithms (Lab.)* (Laurea in Applied Computer Science), l'Università degli Studi di Pisa, Polo Universitario di La Spezia, 2009–2011.
- Tutorial on *Autonomous Mobile Robots: Computations with Unlimited Visibility*, 1^{st} *Research Meeting and School on Distributed Computing by Mobile Robots*, Carleton University, Ottawa, Canada, Aug 2010.
- *Telematica di Base* (Laurea in Informatica Umanistica), Università degli Studi di Pisa, 2008–2010.
- PhD course for the scuola di Dottorato "Galileo Galilei", Dipartimento di Informatica, Università di Pisa, on *Computations by Mobile Entities (Agents, Robots, Sensors)*, June 2007.
- *Algorithms and Data Structured*, SSIS - Informatica - Regione Toscana, 2007.
- *Networks (Lab.)* (Corso di Laurea in Scienza e Teoria dell'Informatica), Università degli Studi di Siena, 2005–2007.
- *Operating Systems* (Corso di Laurea in Scienza e Teoria dell'Informatica), Università degli Studi di Siena, 2004–2007.
- *Informatica* and *Calcolatori Elettronici*, Accademia Navale di Livorno, 2001–2004.

Graduate Supervisions

- 2016, Master of Harish Prakash, *Experimental Analysis of Fault Tolerant Robots' Algorithms*, University of Ottawa, Canada.University of Ottawa, Canada.
- 2013, Tesi di Laurea, *Sycamore: 2D/3D Mobile Robots Simulation Environment* by V. Volpi (Laurea Magistrale in Computer Science, Pisa).
- 2012, Tesi di Laurea, *Sycamore: Un Ambiente di Sviluppo per Autonomous Mobile Robots* by F. Beccari (Laurea Magistrale in Computer Science, Pisa).
- 2005, Tesi di Laurea, *Calcolo Distribuito di Cammini Minimi con Swap-Edge* di D. Mancini (Laurea in Computer Science, Pisa).
- 2004, Tesi di Laurea, *Un Algoritmo Distribuito per Agenti mobili: costruzione dell'Albero di Copertura* di M. Sciolla (Laurea in Computer Science, Pisa).

Research Publications

Books

2012 1. P. Flocchini, G. Prencipe e N. Santoro. *Distributed Computing by Oblivious Mobile Robots.* Morgan & Claypool Publishers, 2012.

Book Chapters, and International Refereed Journals

2017 2. P. Flocchini, G. Prencipe, N. Santoro e G. Viglietta. *Distributed Computing by Mobile Robots: Uniform Circle Formation.* In Distributed Computing, Volume 30, Issue 6, pp 413?457, 2017.

2016 3. S. Das, P. Flocchini, G. Prencipe, N. Santoro e M. Yamashita. *Autonomous mobile robots with lights.* In Theoretical Computer Science, Volume 609 Issue P1, 171-184, 2016.

2015 4. L. Pagli, G. Prencipe e G. Viglietta. *Getting Close without Touching: Near-Gathering for Autonomous Mobile Robots.* Distributed Computing, Vol. 28(5), pp. 333–349.

2012 5. M. Cieliebak, P. Flocchini, G. Prencipe e N. Santoro. *Distributed Computing by Mobile Robots: Gathering.* SIAM J. on Computing, Vol. 41(4), pp. 829–879, 2012.

6. G. Prencipe, C. Zavattari, A. Tommasi e J. Favaro. *Special Issue on Algorithms and Today's Practitioner.* IEEE SOFTWARE, Volume 29, pp. 61–63, 2012.

7. P. Flocchini, T. M. Enriquez, L. Pagli, G. Prencipe e N. Santoro. *Distributed Minimum Spanning Tree Maintenance for Transient Node Failures.* IEEE Transactions on Computers, vol. 61, p. 408-414, 2012.

2011 8. P. Flocchini, G. Prencipe e N. Santoro. *Computing by Mobile Robotic Sensors.* In *Theoretical Aspects of Distributed Computing in Sensor Networks*, Monographs in Theoretical Computer Science, S. Nikoletseas e J. Rolim eds., Part 6, pp. 655–693, Springer, 2011.

2008 9. P. Flocchini, G.Prencipe, N. Santoro e P. Widmayer. *Arbitrary Pattern Formation by Asynchronous, Anonymous, Oblivious Robots.* Theoretical Computer Science (TCS), Vol. 407, pag. 412–447, 2008.

10. P. Flocchini, G. Prencipe e N. Santoro. *Self-Deployment of Mobile Sensor Networks on a Ring.* Theoretical Computer Science (TCS), Vol. 402, pag. 67–80, 2008.

11. P. Flocchini, G. Prencipe, N. Santoro e P. Widmayer. *Computing All The Best Swap Edges Distributively.* Journal of Parallel and Distributing Computing (JPDC), Vol. 68(7), pag. 976–983, 2008.

2007 12. P. Flocchini, S. Dobrev, G. Prencipe e N. Santoro. *Mobile Search for a Black Hole in an Anonymous Ring.* Algorithmica, 48:67–90, 2007.

13. G. Prencipe. *Impossibility of Gathering by a Set of Autonomous Mobile Robots.* Theoretical Computer Science (TCS), Vol. 384(2-3), pag. 222–231, 2007.

2006 14. S. Dobrev, P. Flocchini, G. Prencipe e N. Santoro. *Searching For a Black Hole in Arbitrary Networks: Optimal Mobile Agents Protocols.* Distributed Computing, 19(1): 1–18, 2006.

15. S. Dobrev, P. Flocchini, R. Kralovic, G. Prencipe, P. Ruzicka e N. Santoro. *Black Hole Search in Common Interconnection Networks.* Networks, Vol. 47, Issue 2, 2006, pag. 61–71.

16. P. Flocchini, A. M. Enriques, L. Pagli, G. Prencipe e N. Santoro. *Point-of-Failure Swap Rerouting: Computing The Optimal Swaps Distributively.* IEICE Transactions on Information and Systems, Vol. E89-D N. 2, Febbraio 2006.

2005 17. G. Prencipe. *The Effect of Synchronicity on the Behavior of Autonomous Mobile Robots.* Theory Of Computing Systems (TOCS), Vol. 38, 2005, pag. 539–558.

18. P. Flocchini, G. Prencipe, N. Santoro e P. Widmayer. *Gathering of Asynchronous Robots with Limited Visibility.* Theoretical Computer Science (TCS), Vol. 337, 2005, pag. 147–168.

2004 19. V. Gervasi e G. Prencipe. *Coordination without Communication: The Case of the Flocking Problem.* Discrete Applied Mathematics, Vol. 144, 2004, pag. 324–344.

2002 20. G. Prencipe. *Small memory Software – Patterns for Systems with Limited Memory.* The Computer Journal, Vol. 45(5), 2002, pag. 574–575.

2000 21. P. Flocchini, G. Prencipe, N. Santoro e P. Widmayer. *Pattern Formation by Autonomous Mobile Robots.* InterJournal of Complex Systems, Article, 395.

1997 22. G. Prencipe. *Basic Algorithms for the MRMW PRAM Model.* Calcolo. Vol. 34, 1997, pag. 135–144.

International Refereed Conferences

2018 23. G. A. Di Luna, P. Flocchini, G. Prencipe, N. Santoro e G. Viglietta. *Line Recovery by Programmable Particles.* In International Conference on Distributed Computing and Networking (ICDCN), 2018 (to appear).

2017 24. G. A. Di Luna, P. Flocchini, L. Pagli, G. Prencipe, N. Santoro e G. Viglietta. *Gathering in Dynamic Rings.* In: Structural Information and Communication Complexity (SIROCCO). Lecture Notes in Computer Science, vol 10641.339-355, 2017.

2016 25. B. Davide, V. Gervasi e G. Prencipe. *LOL: An investigation into cybernetic humor, or: Can machines laugh?* In 8th International Conference on Fun with Algorithms (FUN 2016), Leibniz International Proceedings in Informatics (LIPIcs), vol. 49 (1), 3:1–3:15, 2016.

26. G. A. Di Luna, P. Flocchini, G. Prencipe, N. Santoro e G. Viglietta. *A rupestrian algorithm.* In 8th International Conference on Fun with Algorithms (FUN 2016), Leibniz International Proceedings in Informatics (LIPIcs), vol. 49 (1), 14:1–14:20, 2016.

2014 27. P. Flocchini, G. Prencipe, N. Santoro, e G. Viglietta. *Distributed Computing by Mobile Robots: Solving the Uniform Circle Formation Problem.* In Proc. of 18^{th} International Conference on Principles of Distributed Systems (OPODIS 2014), pp. 217–232. LNCS 8878, 2014.

28. V. Gervasi, G. Prencipe, e V. Volpi. *Zombie Swarms: An Investigation on the Behaviour of Your Undead Relatives.* In Proc. of FUN with Algorithms 2014, pp. 206–217. Lipari Island, Sicily, Italy. LNCS 8496, 2014.

29. S. Das, P. Flocchini, G. Prencipe, e N. Santoro. *Synchronized Dancing of Oblivious Chameleons.* In Proc. of FUN with Algorithms 2014, pp. 113–124. Lipari Island, Sicily, Italy. LNCS 8496, 2014.

30. G. Prencipe. *Autonomous Mobile Robots: A Distributed Computing Perspective.* In Proc. of ALGOSENSORS 2013, pp. 6–21. Barcellona, Spain. LNCS 8243, 2014.

2013 31. A. K. Datta, L. L. Larmore, L. Pagli e G. Prencipe. *Linear Time Distributed Swap Edge Algorithms.* In Proc. of CIAC 2013, pp. 122–133. Sophia Antipolis, France, September 5-6, 2013. LNCS 7878.

2012 32. L. Pagli, G. Prencipe e G. Viglietta. *Getting Close Without Touching.* In Proc. of SIROCCO 2012, pp. 315–326. Reykjavk, Iceland. LNCS 7355, 2012

33. S. Das, P. Flocchini, G. Prencipe, N. Santoro, e M. Yamashita. *The Power of Lights: Synchronizing Asynchronous Robots Using Visible Bits.* In Proc. of 2012 IEEE 32^{nd} International Conference on Distributed Computing Systems (ICDCS), pp.506-515, 2012.

2009 34. L. Pagli e G. Prencipe. *Distributed Swap Edges Computation for Minimum Routing Cost Spanning Trees.* In Proc. of OPODIS 2009. LNCS 5923, pag. 365–371, 2009.

2007 35. P. Flocchini, T. Mesa Enriquez, L. Pagli, G. Prencipe e N. Santoro. *Distributed Computation of All Node Replacements of a Minimum Spanning Tree.* In Proc. of EUROPAR 2007. Rennes, France, Agosto 2007, LNCS 4641, pag. 598–607.

2006 36. G. Prencipe e N. Santoro. *Distributed Algorithms for Autonomous Mobile Robots.* In Proc. of Fourth IFIP International Conference on Theoretical Computer Science - TCS 2006, Springer Series *IFIP International Federation for Information Processing*, Vol. 209, pag. 47–62. Santiago, Cile, Agosto 2006.

37. P. Flocchini, G. Prencipe e N. Santoro. *Self-Deployment Algorithms for Mobile Sensors on a Ring.* In Proc. of 2^{nd} International Workshop on Algorithmic Aspects of Wireless Sensor Networks (Algosensors 2006). Venezia, Italia, Luglio 2006, LNCS 4240.

2005 38. L. Anderegg, M. Cieliebak e G. Prencipe. *Efficient Algorithms for Detecting Regular Point Configurations.* In Proc. of 9^{th} Italian Conference on Theoretical Computer Science (ICTCS 2005), pag. 23–35. Certosa di Pontignano, Italia, 12–14 Ottobre 2005, LNCS 3701.

39. G. Prencipe. *On The Feasibility of Gathering by Autonomous Mobile Robots.* In Proc. of 12^{th} International Colloquium on Structural Information and Communication Complexity (SIROCCO 2005), pag. 246–261. Mont Saint-Michel, Francia, 24–26 Maggio 2005, LNCS 3499.

2004 40. L. Pagli, G. Prencipe e T. Zuva. *Distributed Computation for Swapping a Failing Edge.* In Proc. of 6^{th} International Workshop on Distributed Computing (IWDC 2004), pag. 28–39. Kolkata, India, 27–30 Dicembre 2004, LNCS 3326.

41. P. Flocchini, L. Pagli, G. Prencipe, N. Santoro, P. Widmayer e T. Zuva. *Computing All the Best Swap Edges Distributively.* In Proc. of 8^{th} International Conference on Principles of Distributed Systems (OPODIS 2004), pag. 154–168. Grenoble, Francia, Dicembre 2004, LNCS 3544.

42. P. Flocchini, A. M. Enriques, L. Pagli, G. Prencipe e N. Santoro. *Efficient Protocols for Computing The Optimal Swap Edges of a Shortest Path Tree.* In Proc. of 3^{rd} IFIP International Conference on Theoretical Computer Science (TCS 2004), pag.153–166. Toulouse, Francia, 23–26 Agosto 2004.

43. V. Gervasi e G. Prencipe. *On The Efficient Capture of Dangerous Criminals.* In Proc. of 3^{rd} International Conference on FUN With Algorithms (FUN 2004), pag. 184–196. Isola d'Elba, Italia, 26–28 Maggio 2004.

2003 44. S. Dobrev, P. Flocchini, G. Prencipe e N. Santoro. *Multiple Agents RendezVous In a Ring in Spite of a Black Hole.* In Proc. of 7^{th} International Conference on Principles of Distributed Systems (OPODIS 2003), pag. 34–46. La Martinique, French West Indies, 10–13 Dicembre 2003, LNCS 3144.

45. V. Gervasi e G. Prencipe. *Robotic Cops: The Intruder Problem.* In Proc. of 2003 IEEE Conference on Systems, Man and Cybernetics (SMC 2003), pag. 2284–2289. Washington D. C., USA, 5–8 Ottobre 2003.

46. M. Cieliebak, P. Flocchini, G. Prencipe e N. Santoro. *Solving the Robots Gathering Problem.* In Proc. of 30^{th} International Colloquium on Automata, Languages and Programming (ICALP 2003), pag. 1181–1196. Eindhoven, The Netherlands, 30 Giugno – 4 Luglio, 2003, LNCS 2719.

47. G. Prencipe *The Black Hole Search Problem – Facing the Harmful Hosts Threats in Distributed Mobile Computing Environments.* In Proc. of International Workshop on Interconnection Networks (IWIN 2003). Umea, Svezia, 16–17 Giugno 2003.

2002 48. S. Dobrev, P. Flocchini, R. Královic, G. Prencipe, P. Ružička e N. Santoro. *Black Hole Search by Mobile Agents in Hypercubes and Related Networks.* In Proc. of 6^{th} International Conference on Principles of Distributed Systems (OPODIS 2002), pag. 171–182. Reims, France, 11–13 Dicembre 2002.

49. G. Prencipe e V. Gervasi. *On the Intelligent Behavior of Stupid Robots.* Atti dell'VIII Convegno AI*IA. Siena, Italia, 10-13 Settembre 2002.

50. S. Dobrev, P. Flocchini, G. Prencipe e N. Santoro. *Searching for a Black Hole in Arbitrary Networks: Optimal Mobile Agent Protocols.* In Proc. of 21^{st} ACM Symposium on Principles of Distributed Computing (PODC 2002), pag. 153–162. Monterey, California, 21–24 Luglio 2002.

51. M. Cieliebak e G. Prencipe. *Gathering Autonomous Mobile Robots.* In Proc. of 9^{th} International Colloquium on Structural Information and Communication Complexity (SIROCCO 2002), pag. 57–72. Andros, Grecia, 10–12 Giugno 2002.

52. F. Dehne, S. Mardegan, A. Pietracaprina e G. Prencipe. *Distribution Sweeping on Clustered Machines with Hierarchical Memories.* In Proc. of IEEE International Parallel and Distributed Symposium (IPDPS 2002). Fort Lauderdale, Florida, 15–19 Aprile 2002.

2001 53. G. Prencipe. *Instantaneous Actions vs. Full Asynchronicity: Controlling and Coordinating a Set of Autonomous Mobile Robots.* In Proc. of 7^{th} Italian Conference on Theoretical Computer Science (ICTCS 2001), pag. 154–171. Torino, Italia, 4-6 Ottobre 2001, LNCS 2202.

54. S. Dobrev, P. Flocchini, G. Prencipe e N. Santoro. *Mobile Search for a Black Hole in an Anonymous Ring.* In Proc. of 15^{th} International Symposium on Distributed Computing (DISC 2001), pag. 166-179. Lisboa, Portugal, 3-5 Ottobre 2001, LNCS 2180.

55. P. Flocchini, G. Prencipe, N. Santoro e P. Widmayer. *Pattern Formation by Autonomous Robots Without Chirality.* In Proc. of 8^{th} International Colloquium on Structural Information and Communication Complexity (SIROCCO 2001), pp. 147-162. Vall de Núria, Spagna, 27-29 Giugno 2001.

56. V. Gervasi e G. Prencipe. *Need a Fleet? Use The Force!* In Proc. of Fun With Algorithms 2 (FUN 2001), pp. 149-164. Isola d'Elba, Italia, 27-31 Maggio 2001.

57. G. Prencipe. CORDA*: Distributed Coordination of a Set of Autonomous Mobile Robots.* In Proc. 4^{th} European Research Seminar on Advances in Distributed Systems (ERSADS 2001), pp. 185-190. Bertinoro, Italia, Maggio 2001.

58. P. Flocchini, G. Prencipe, N. Santoro e P. Widmayer. *Gathering of Asynchronous Oblivious Robots With Limited Visibility.* In Proc. of 18^{th} International Symposium on Theoretical Aspects of Computer Science (STACS 2001), pp. 247-258. Dresden, Germania, 15-17 Febbraio 2001, LNCS 2010.

2000 59. P. Flocchini, G. Prencipe, N. Santoro e P. Widmayer. *Distributed Coordination of a Set of Autonomous Mobile Robots.* In Proc. of IEEE Intelligent Veichle Symposium (IV 2000), pp. 480–485. Dearborn, USA, 3-5 Ottobre 2000.

60. E. Caceres, A. Chan, F. Dehne e G. Prencipe. *Coarse Grained Parallel Algorithms for Detecting Convex Bipartite Graphs.* In Proc. of 26^{th} International Workshop on Graph-Theoretic Concepts in Computer Science (WG 2000), pp. 83-94, Konstanz, Germany, 15-17 Giugno 2000, LNCS 1928.

1999 61. P. Flocchini, G.Prencipe, N. Santoro e P. Widmayer. *Hard Tasks for Weak Robots: The Role of Common Knowledge in Pattern Formation by Autonomous Mobile Robots.* In Proc. of 10^{th} Annual International Symposium on Algorithms and Computation (ISAAC 99), pp. 93-102. Chennai, India, 16-18 Dicembre 1999, LNCS 1741.

Editorships

2012 1. G. Prencipe, C. Zavattari, A. Tommasi e J. Favaro. *Special Issue on Algorithms and Today's Practitioner, IEEE SOFTWARE.* Volume 29, pp. 61–83, 2012.

2009 2. G. Prencipe e S. Zaks. *Special Issue on Theoretical Computer Science.* Volume 410, Issue 14, pp. 1305-1412 (March 2009).

2007 3. G. Prencipe e S. Zaks. *Proceedings of the* 14^{th} *Colloquium on Structural Information and Communication Complexity (SIROCCO 2007).* Castiglioncello (LI), Italia, 6-8 Giugno 2007.

4. P. Crescenzi, G. Prencipe e G. Pucci. *Proceedings of the* 4^{th} *International Conference on FUN With Algorithms (FUN 2007).* Castiglioncello (LI), Italia, 3-6 Giugno 2007.

2005 5. J. Anderson, G. Prencipe e R. Wattenhofer. *Proceedings of the* 9^{th} *International Conference on Principles of Distributed Systems (OPODIS 2005).* Pisa, Italia, 12-14 Dicembre 2005.