Curriculum Vitae

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Personal

Birth: Sassari, Italy, September 17, 1963.

Residence: Via Bassa 6, I-35127 Padova, Italy.

Education

05/94 **Ph.D.** in Computer Science, University of Illinois at Urbana-Champaign. Advisor: Prof. Franco P. Preparata. Thesis Title: "Isotropic Graphs with Applications to Parallel Computation."

01/91 **M.S.** in Computer Science, University of Illinois at Urbana-Champaign. Advisor: Prof. Franco P. Preparata. Thesis Title: "Analysis of the Unbuffered Butterfly Network."

02/87 **Laurea (summa cum laude)** in Computer Science, University of Pisa, Italy. Advisor: Prof. Fabrizio Luccio. Thesis Title: "A Study of Parallel Hashing in VLSI."

Professional Appointments

08–13 **Vice-Chair** of the Department of Information Engineering, University of Padova, Italy.

02– **Full Professor of Computer Science**, Department of Information Engineering, University of Padova, Italy.

12 **Consultant for Tektronix Padova srl**

02–04 **Reviewer of European Projects**, funded under the 5th EU Framework Programme.

98–02 **Associate Professor**, Department of Information Engineering, University of Padova, Italy.

95–98 **Assistant Professor**, Department of Pure and Applied Mathematics, University of Padova, Italy.

94–95 **Postdoctoral Fellow**, Department of Information Engineering, University of Padova, Italy.

91–93 **Research Assistant**, Department of Computer Science, Brown University, Providence.

89–92 **Research Assistant**, Coordinated Science Laboratory, University of Illinois at Urbana-Champaign.

87 **Research Assistant**, Department of Computer Science, University of Pisa, Italy.

Other Appointments

87-88 **Officer** of the Italian Army.

Awards

- **Best Paper Award** at the 18th IEEE Int. Parallel and Distributed Processing Symposium (IPDPS), Algorithms Track, 2004.
- **IBM Italia Award** for Laurea Thesis in Computer Science, 1987.
- **UNITEAM Award** for Laurea Thesis in Computer Science, 1987.

Professional Memberships

- **ACM**: Association for Computing Machinery, since 1994
- **IEEE**: Institute of Electrical and Electronics Engineers, since 1994
- **EATCS**: European Association for Theoretical Computer Science, since 2012.

Teaching

Courses

The courses listed below have been taught at the University of Padova. Some graduate courses (Parallel Algorithms and Architectures and Data Mining) have also been taught at University of Siena and at the UNESCO Advanced School of Informatics.

- **Undergraduate level:** Foundations of Computer Science; Programming; Algorithms and Data Structures.
- **Graduate level:** Parallel Computation; Parallel Algorithms and Architectures; Information Systems; Data Mining; Management and Processing of Large Data Sets.

PhD Students

- **Matteo Ceccarello:** From 2014.
- **Fabio Vandin:** Graduated in 2010. Currently: Research Assistant Professor at the Department of Computer Science, Brown University.
- **Francesco Silvestri:** Graduated in 2009. Currently: Postoctoral Fellow at the Department of Information Engineering, University of Padova.

Master's Students

Advisor of over 40 Master's students in Computer Science and Engineering.

Research

Current Areas of Interest

- Models, algorithms and data structures for parallel and/or hierarchical architectures.
- Algorithms and methodologies for data mining problems, and their applications.
- Topological properties and communication primitives for static/mobile interconnection networks.

Funding

- **Local Coordinator** for project *AMANDA: Algorithmics for MAssive and Networked DAta*, funded by MIUR of Italy (2014-2017)
- **Project Coordinator** for project CDPA-121378: *BiD-Algo: Big Data Algorithmics*, funded by the University of Padova (2013–2014).
- **National Coordinator** for project *AlgoDEEP: Algorithmic challenges for Data-intensivE processing on Emerging computing Platforms*, funded by MIUR of Italy (2010-2012)
- **Project Coordinator** for project CDPA-033838: *A Programming Framework for Parallel and Hierarchical Machines: Theory and Implementation*, funded by the University of Padova (2004–2005).
- **Project Coordinator** for CNR Bilateral Projects CNR96-02538-CT07 and CNR-97-03207-CT07 on *Load Balancing and Exhaustive Search Techniques for Parallel Architectures*, in collaboration with University College Cork, Cork, Ir, (1996–1997)
- **Principal Investigator** for NATO Project CRG 961243 on *Bulk Synchronous Computational Geometry*, in collaboration with Texas A&M University, College Station, USA, (1996–1997).

- **Key Researcher** for the following projects: AACSE: *Algorithms and Architectures for Computational Science and Engineering*, Strategic Project STPD08JA32 funded by the University of Padova (2008-2012). AEOLUS: *Algorithmic Principles for Building Efficient Overlay Computers*, EU FP6 Integrated Project (2005-2009) MAINSTREAM: *Algorithms for Massive Information Structures and Data Streams*, MIUR PRIN (2007-2009); ALGONEXT: *Algorithms for the Next Generation Internet and the Web*, MIUR PRIN (2004-2006); ALINWEB: *Algorithmics for Internet and for the Web*, MIUR PRIN (2002-2004); *Center of Excellence: Science and Applications of Advanced Computational Paradigms*, funded by the University of Padova (2001–2004); *Algorithms, Models of Computations e Information Structures*, MURST 40%, (1995-1997); *Algorithms for Large Data Sets: Science and Engineering*, MURST PRIN (1999-2001); *Foundations of GEneral Purpose Parallel COMputing*, ESPRIT-GEPPCOM No.9072 (1994-1997).

Program Committees

- **International Euro-Par Conference**, Southampton, UK (1998); Pisa, Italy (2004); Lisbon, Portugal (2005 - **Global Chair of Topic 12**: "Theory and Algorithms for Parallel Computation"), Delft, The Netherlands (2009 - **Global Chair of Topic 12**: "Theory and Algorithms for Parallel Computation"), and Porto, Portugal (2014 - **Global Chair of Topic 12**: "Theory and Algorithms for Parallel Computation").
- **ACM SPAA: Annual ACM Symposium on Parallel Algorithms and Architectures**, Winnipeg, Canada (2002); Las Vegas NV, USA (2005); and Munich, Germany (2008).
- **IEEE IPDPS: International Parallel and Distributed Processing Symposium**, Miami FL, USA (2008); Atlanta, GA, USA (2010); and, Shanghai, China (2012).
- **ACM Int. Conf. on Computing Frontiers**, Bertinoro, Italy (2010); and Ischia, Italy (2013).
- **HPPD-DM: Int. Conf. on High Performance Computing & Simulation. (Special Session on High Performance Parallel and Distributed Data Mining)**, Caen, France (2010); Istanbul, Turkey (2011); and Helsinki, Finland (2013).
- **ICALP: 40th Int. Colloquium on Automata, Languages and Programming**, Copenhagen, Denmark (2014)

Also, PC member of: *37th Annual AICA Conference*, *ICTCS'03: 8th Italian Conference on Theoretical Computer Science*, *FUN'04: 3rd International Conference on FUN with Algorithms*, *WEA'05: 4th International Workshop on Efficient and Experimental Algorithms*, *HLPP'05: 3rd International Workshop on High-level Parallel Programming and Applications I-SPAN'05: 8th International Symposium on Parallel Architectures, Algorithms, and Networks HPPC'07: Workshop on Highly Parallel Processing on a Chip*, *PACT'07: Parallel Architectures and Compilation Techniques*, *IEEE IC3: 4th International Conference on Contemporary Computing*, *SPIRE: 18th Int. Symposium on String Processing and Information Retrieval*.

Other Committees

- *Euro-Par Conference*. Member of the Advisory Board since 1999.
- *ICALP'06: 33rd International Colloquium on Automata, Languages and Programming*, Venezia, Italy, 2006. Co-Chair of the Satellite Events Committee.
- *ESA'98: 6th Annual European Symposium on Algorithms*, Venezia, Italy, 1998. Member of the Organizing Committee.
- *ACM SPAA'96: 8th ACM Symposium on Parallel Algorithms and Architectures*, Padova, Italy, 1996. Member of the Organizing Committee.
- *Summer School on Architectures and Programming Paradigms for Parallel Computers*, Padova, Italy, 1996. Lecturer and member of the Organizing Committee.
- *Italian-Israeli Workshop on Algorithmic Aspects of Molecular Biology*, Padova, Italy, 1994. Member of the Organizing Committee.

Editorial Activities

10– *Journal of Discrete Algorithms*: Editor.

04–09 *IEEE Transactions on Parallel and Distributed Computing*: Associate Editor.

08 *Theoretical Computer Science*: Guest Co-Editor of Special Issue 408(2-3).

Invited Lectures

05/10 *5th Workshop on Random Graphs and Randomized Algorithms (RandomGraals)*, Bertinoro, Italy.

06/09 *Dagstuhl-Seminar on Dynamic Communication Networks*, Schloss Dagstuhl, Germany.

11/08 *4th Workshop on Random Graphs and Randomized Algorithms (RandomGraals)*, Bertinoro, Italy.

09/07 *Scalable Approaches to High Performance and High Productivity Computing (ScalPerf07)*, Bertinoro, Italy.

10/05 *Scalable Approaches to High Performance and High Productivity Computing (ScalPerf05)*, Bertinoro, Italy.

09/04 *Scalable Approaches to High Performance and High Productivity Computing (ScalPerf04)*, Bertinoro, Italy.

04/04 *UNESCO/CISM 2nd Advanced School of Informatics*, University of Damascus, Syria.

11/03 *Workshop on Frequent Itemset Mining Implementations (FIMI'03)*, Melbourne FL, USA (panelist).

10/01 *Workshop on Advanced MEthods and Tools for Computational Science and Engineering*, Roma, Italy.

05/99 *DIMACS Workshop on Distributed Data and Structures*, Computer Science Department, Princeton University, Princeton, NJ, USA.

09/97 *Dagstuhl-Seminar 9737 on Parallel and Distributed Algorithms*, Schloss Dagstuhl, Germany.

09/96 *Chinese Academy of Sciences*, Beijing, China.

06/96 *Summer School on Architectures and Programming Paradigms for Parallel Computers*, Padova, Italy.

12/95 *Heinz Nixdorf Institute*, University of Paderborn, Paderborn, Germany.

09/95 *Dagstuhl-Seminar 9537 on Parallel and Distributed Algorithms*, Schloss Dagstuhl, Germany.

Publications

[1] G. Bilardi and A. Pietracaprina. Theoretical models of computation. In D. Padua, editor, *Encyclopedia of Parallel Computing*, pages 1150–1158. Springer, 2011.

[2] G. Bilardi, A. Pietracaprina, and G. Pucci. Decomposable BSP: A bandwidth-latency model for parallel and hierarchical computation. In J. Reif and S. Rajasekaran, editors, *Handbook of Parallel Computing: Models, Algorithms, and Applications*. CRC Press, Boca Raton Fl, USA, 2007.

[3] N. M. Amato, D.T. Lee, A. Pietracaprina, and R. Tamassia, editors. *Excursions in Algorithmics: A Collection of Papers in Honor of Franco P. Preparata*. Theoretical Computer Science 408(2-3). Elsevier, 2008.

[4] A. Pietracaprina (Global Chair), R.H. Bisseling, E. Lebhar, and A. Tiskin. Topic 12: Theory and algorithms for parallel computation. In *Euro-Par 2008 - Parallel Processing*, LNCS 5704, page 989. Springer-Verlag, 2009.

[5] A. Pietracaprina (Global Chair), K.T. Herley, C.D. Zaroliagis, and C. Rodriguez-Leon. Topic 12: Theory and algorithms for parallel computation. In *Euro-Par 2005 - Parallel Processing*, LNCS 3648, page 929. Springer-Verlag, 2005.

[6] G. Bilardi, G.F. Italiano, A. Pietracaprina, and G. Pucci, editors. *Proceedings of the 6th Annual European Symposium on Algorithms (ESA'98)*. LNCS 1461. Springer-Verlag, Venice, I, August 1998.

[7] N. Lazzarini, L. Nanni, C. Fantozzi, A. Pietracaprina, G. Pucci, T.M. Seccia, and G.P. Rossi. Heterogeneous machine learning system for diagnosing primary aldosteronism. *Journal of Hypertension*, 31(e-Supplement A):e409, 2013.

[8] A. Pettarin, A. Pietracaprina, and G. Pucci. On the expansion and diameter of Bluetooth-like topologies. *Theory of Computing Systems*, 52(2):319–339, 2013.

[9] A. Kirsch, M. Mitzenmacher, A. Pietracaprina, G. Pucci, E. Upfal, and F. Vandin. An efficient rigorous approach for identifying statistically significant frequent itemsets. *Journal of the ACM*, 59(3):12, 2012.

[10] R. Grossi, A. Pietracaprina, N. Pisanti, G. Pucci, E. Upfal, and F. Vandin. MADMX: A strategy for maximal dense motif extraction. *Journal of Computational Biology*, 18(4):535–545, 2011.

[11] A. Pietracaprina, M. Riondato, E. Upfal, and F. Vandin. Mining top-k frequent itemsets through progressive sampling. *Data Mining and Knowledge Discovery*, 21(2):310–326, 2010.

[12] S. Nasso, F. Silvestri, F. Tisiot, B. Di Camillo, A. Pietracaprina, and G. Toffolo. An optimized data structure for high-throughput 3D proteomics data: mzRTree. *Journal of Proteomics*, 73:1176–1182, 2010.

[13] P. Crescenzi, C. Nocentini, A. Pietracaprina, and G. Pucci. On the connectivity of Bluetooth-based *ad hoc* networks. *Concurrency and Computation: Practice and Experience*, 21(7):875–887, 2009.

[14] P. Bertasi, M. Bianco, A. Pietracaprina, and G. Pucci. Obtaining performance measures through microbenchmarking in a peer-to-peer overlay computer. *International Journal of Computational Intelligence Research*, 4(1):1–8, 2008. Special issue on Computational Intelligence in Scheduling and Simulation.

[15] K.T. Herley, A. Pietracaprina, and G. Pucci. Store-and-forward multicast routing on the mesh. *Theory of Computing Systems*, 42(4):519–535, 2008.

[16] C. Fantozzi, A. Pietracaprina, and G. Pucci. Translating submachine locality into locality of reference. *Journal of Parallel and Distributed Computing*, 66:633–646, 2006. Special issue on the *18th International Parallel and Distributed Processing Symposium*.

[17] A. Pietracaprina and G. Pucci. Optimal many-to-one routing on the mesh with constant queues. *Information Processing Letters*, 96:24–29, 2005.

[18] G. Bilardi, K.T. Herley, A. Pietracaprina, and G. Pucci. On stalling in LogP. *Journal of Parallel and Distributed Computing*, 65:307–312, 2005.

[19] C. Fantozzi, A. Pietracaprina, and G. Pucci. A general PRAM simulation scheme for clustered machines. *Intl. Journal of Foundations of Computer Science*, 14(6):1147–1164, 2003.

[20] K. Herley, A. Pietracaprina, and G. Pucci. Fast deterministic backtrack search. *Theoretical Computer Science*, 270(1-2):309–324, 2002.

[21] R. Grossi, A. Pietracaprina, and G. Pucci. Optimal deterministic protocols for mobile robots on a grid. *Information and Computation*, 173:132–142, 2002.

[22] K. Herley, A. Pietracaprina, and G. Pucci. Implementing shared memory on mesh-connected computers and on the fat-tree. *Information and Computation*, 165:123–142, 2001.

[23] A. Pietracaprina, G. Pucci, and J. Sibeyn. Constructive, deterministic implementation of shared memory on meshes. *SIAM Journal on Computing*, 30(2):625–648, 2000.

[24] K. Herley, A. Pietracaprina, and G. Pucci. Deterministic branch-and-bound on distributed memory machines. *Intl. Journal of Foundations of Computer Science*, 10(4):391–404, 1999.

[25] K. Herley, A. Pietracaprina, and G. Pucci. Fast deterministic branch-and-bound. *Parallel Processing Letters*, 9(3):325–334, 1999.

[26] G. Bilardi, K.T. Herley, A. Pietracaprina, G. Pucci, and P. Spirakis. BSP vs LogP. *Algoritmica*, 24:405–422, 1999. Special Issue on Coarse Grained Parallel Algorithms.

[27] A. Bäumker, W. Dittrich, and A. Pietracaprina. The complexity of parallel multisearch on coarse grained machines. *Algoritmica*, 24:209–242, 1999. Special Issue on Coarse Grained Parallel Algorithms.

[28] A. Pietracaprina and G. Pucci. The complexity of detrministic PRAM simulation on Distributed Memory Machines. *Theory of Computing Systems*, 30(3):231–247, 1997.

[29] A. Pietracaprina and F.P. Preparata. Practical constructive schemes for deterministic shared-memory access. *Theory of Computing Systems*, 30(1):3–37, 1997. Special Issue for ACM-SPAA'93.

[30] A. Krishna, A. Pietracaprina, and B. Hajek. Sharper analysis of packet routing on a butterfly. *Networks*, 24(2):91–101, 1994.

[31] F. Luccio, A. Pietracaprina, and G. Pucci. Analysis and implementation of parallel uniform hashing. *The International Journal on Foundations of Computer Science*, 3(1):55–63, 1992.

[32] F. Luccio, A. Pietracaprina, and G. Pucci. Analysis of parallel uniform hashing. *Information Processing Letters*, 37(2):67–69, 1991.

[33] F. Luccio, A. Pietracaprina, and G. Pucci. A new scheme for the deterministic simulation of PRAMs in VLSI. *Algorithmica*, 5(4):529–544, 1990.

[34] F. Luccio, A. Pietracaprina, and G. Pucci. A probabilistic simulation of PRAMs on a bounded degree network. *Information Processing Letters*, 28:141–147, 1988.

[35] A. Pietracaprina, G. Pucci, F. Silvestri, and F. Vandin. Space-efficient parallel algorithms for combinatorial search problems. In *Proc. of the 38th Intl. Symp. on Mathematical Foundations of Computer Science*, pages 717–728, 2013.

[36] A. Pietracaprina, G. Pucci, M. Riondato, F. Silvestri, and E. Upfal. Space-round tradeoffs for MapReduce computations. In *Proc. of the ACM Int. Conference on Supercomputing (ICS)*, pages 235–244, 2012.

[37] A. Pettarin, A. Pietracaprina, G. Pucci, and E. Upfal. Tight bounds on information dissemination in sparse mobile networks. In *Proc. of the 30th ACM Symp. on Principles of Distributed Computing (PODC)*, pages 355–362, 2011.

[38] A. Pettarin, A. Pietracaprina, and G. Pucci. On the expansion and diameter of Bluetooth-like topologies. In *Proc. of the 17th European Symposium on Algorithms (ESA)*, LNCS 5757, pages 528–539, 2009.

[39] A. Kirsch, M. Mitzenmacher, A. Pietracaprina, G. Pucci, E. Upfal, and F. Vandin. An efficient rigorous approach for identifying statistically significant frequent itemsets. In *Proc. of the 17th ACM Symp. on Principles of Database Systems (PODS)*, pages 117–126, 2009.

[40] R. Grossi, A. Pietracaprina, N. Pisanti, G. Pucci, E. Upfal, and F. Vandin. MADMX: A novel strategy for maximal dense motif extraction. In *Proc. of the 9th Int. Workshop on Algorithms in Bioinformatics (WABI)*, LNCS 5724, pages 362–374, 2009.

[41] P. Bertasi, M. Bianco, A. Pietracaprina, and G. Pucci. Obtaining performance measures through microbenchmarking in a peer-to-peer overlay computer. In *Proc. of the 1st IEEE Int. Conference on Complex, Intelligent and Software Intensive Systems*, pages 285–290, 2007.

[42] A. Pietracaprina and F. Vandin. Efficient incremental mining of top-k frequent closed itemsets. In *Proc. of the 10th Discovery Science (DS)*, LNCS 4755, pages 275–280, 2007.

[43] P. Crescenzi, C. Nocentini, A. Pietracaprina, G. Pucci, and C. Sandri. On the connectivity of Bluetooth-based ad hoc networks. In *Proc. of Euro-Par 2007*, LNCS 4641, pages 960–969, 2007.

[44] G. Bilardi, A. Pietracaprina, G. Pucci, and F. Silvestri. Network-oblivious algorithms. In *Proc. 21st IEEE Int. Parallel and Distributed Processing Symposium (IPDPS)*, 2007.

[45] A. Pietracaprina, G. Pucci, and F. Silvestri. Cache-oblivious simulation of parallel programs. In *Proc. Workshop on Advances in Parallel and Distributed Computational Models*, 2006.

[46] G. Bilardi, A. Pietracaprina, G. Pucci, F. Schifano, and R. Tripiccione. The potential of on-chip multiprocessing for QCD machines. In *Proc. 12th IEEE International Conf. on High-Performance Computing*, pages 386–397, 2005.

[47] C. Fantozzi, A. Pietracaprina, and G. Pucci. Translating submachine locality into locality of reference. In *Proc. of the 18th IEEE Int. Parallel and Distributed Processing Symposium (IPDPS)*, 2004. Best Paper Award (Algorithms Track).

[48] A. Pietracaprina and D. Zandolin. Mining frequent itemsets using Patricia tries. In *Proc. of the Workshop on Frequent Itemset Mining Implementations (FIMI)*, Vol. 90. CEUR-WS Workshop On-line Proceedings, 2003.

[49] C. Fantozzi, A. Pietracaprina, and G. Pucci. Seamless integration of parallelism and memory hierarchy. In *Proc. of 29th Int. Colloquium on Automata, Languages and Programming (ICALP)*, LNCS 2380, pages 856–867, 2002.

[50] F. Dehne, S. Mardegan, A. Pietracaprina, and G. Prencipe. Distribution sweeping on clustered machines with hierarchical memories. In *Proc. of the 16th IEEE Int. Parallel and Distributed Processing Symposium (IPDPS)*, 2002.

[51] A. Pietracaprina and G. Pucci. Optimal many-to-one routing on the mesh. In *Proc. of Euro-Par 2001*, LNCS 2150, pages 645–650, 2001.

[52] K.T. Herley, A. Pietracaprina, and G. Pucci. One-to-many routing on the mesh. In *Proc. of the 13th ACM Symp. on Parallel Algorithms and Architectures (SPAA)*, pages 31–37, 2001.

[53] G. Bilardi, C. Fantozzi, A. Pietracaprina, and G. Pucci. On the effectiveness of D-BSP as a bridging model of parallel computation. In *Proc. of the Int. Conference on Computational Science*, LNCS 2074, pages 579–588, 2001.

[54] C. Fantozzi, A. Pietracaprina, and G. Pucci. Implementing shared memory on clustered machines. In *Proc. of 15th IEEE Int. Parallel and Distributed Processing Symposium (IPDPS)*, 2001.

[55] G. Bilardi, A. Pietracaprina, and P. D'Alberto. On the space and access complexity of computation dags. In *Proc. of the 26th Workshop on Graph-Theoretic Concepts in Computer Science (WG)*, LNCS 1928, pages 47–58, 2000.

[56] G. Bilardi, K. Herley, A. Pietracaprina, and G. Pucci. On stalling in LogP. In *Proc. of the Workshop on Advances in Parallel and Distributed Computational Models*, LNCS 1800, pages 109–115, 2000.

[57] N.M. Amato, J. Perdue, A. Pietracaprina, G. Pucci, L.K. Dale, and J. Purdue. Predicting performance on SMP's. A case study: The SGI Power Challenge. In *Proc of the 14th IEEE Int. Parallel and Distributed Processing Symposium (IPDPS)*, pages 729–737, 2000.

[58] G. Bilardi, A. Pietracaprina, and G. Pucci. A quantitative measure of portability with application to bandwidth-latency models for parallel computing. In *Proc. of Euro-Par 1999*, LNCS 1685, pages 543–551, 1999.

[59] K. Herley, A. Pietracaprina, and G. Pucci. Deterministic branch-and-bound on distributed memory machines. In *Proc. of IRREGULAR*, pages 1085–1094, 1999.

[60] R. Grossi, A. Pietracaprina, and G. Pucci. Optimal deterministic protocols for mobile robots on a grid. In *Proc. ot the 6th Scandinavian Workshop on Algorithm Theory (SWAT)*, LNCS 1432, pages 181–192, 1998.

[61] A. Pietracaprina. Deterministic routing of h-relations on the multibutterfly. In *Proc. of the First Merged IPPS/SPDP Symposium: 12th International Parallel Processing Symposium and 9th Symposium on Parallel and Distributed Processing*, pages 375–379, 1998.

[62] K. Herley, A. Pietracaprina, and G. Pucci. Fast deterministic backtrack search. In *Proc. of the 23rd Int. Colloquium on Automata, Languages and Programming (ICALP)*, LNCS 1099, pages 598–609, 1996.

[63] A. Bäumker, W. Dittrich, and A. Pietracaprina. The deterministic complexity of parallel multisearch. In *Proc. ot the 5th Scandinavian Workshop on Algorithm Theory (SWAT)*, LNCS 1097, pages 404–415, 1996.

[64] G. Bilardi, K.T. Herley, A. Pietracaprina, G. Pucci, and P. Spirakis. BSP vs LogP. In *Proc. of the 8th ACM Symp. on Parallel Algorithms and Architectures (SPAA)*, pages 25–32, 1996.

[65] K. Herley, A. Pietracaprina, and G. Pucci. Implementing shared memory on multi-dimensional meshes and on the fat-tree. In *Proc. of the 3rd European Symposium on Algorithms (ESA)*, LNCS 979, pages 60–74, 1995.

[66] A. Pietracaprina and G. Pucci. Improved deterministic PRAM simulation on the mesh. In *Proc. 22nd Int. Colloquium on Automata, Languages and Programming (ICALP)*, LNCS 1099, pages 598–609, 1995.

[67] A. Pietracaprina and G. Pucci. Tight bounds on deterministic PRAM emulations with constant redundancy. In *Proc. 2nd European Symposium on Algorithms (ESA)*, LNCS 855, pages 319–400, 1994.

[68] A. Pietracaprina, G. Pucci, and J. Sibeyn. Constructive deterministic PRAM simulation on a mesh-connected computer. In *Proc. 6th ACM Symp. on Parallel Algorithms and Architectures (SPAA)*, pages 248–256, 1994.

[69] A. Pietracaprina and F.P. Preparata. A practical constructive scheme for deterministic shared-memory access. In *Proc. 5th ACM Symp. on Parallel Algorithms and Architectures (SPAA)*, pages 100–109, 1993.

[70] A. Pietracaprina and F.P. Preparata. An $O(\sqrt{n})$-worst-case-time solution to the granularity problem. In *Proc. 10th Symp. on Theoretical Aspects of Computer Science (STACS)*, LNCS 665, pages 110–119, 1993.

[71] A. Krishna, A. Pietracaprina, and B. Hajek. Packet routing in optimal time on a butterfly. In *Proc. of the 10th IEEE INFOCOM*, pages 0840–0849, 1991.

[72] F. Luccio, A. Pietracaprina, and G. Pucci. Analysis and implementation of parallel uniform hashing. In *Proc. 1st Italian Conference on Algorithms and Complexity*, pages 1–12. World Scientific, 1990.