Christoph Dürr

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senior researcher (DR2)

Research areas

algorithms	scheduling, online algorithms, mathematical programming
former areas	cellular automata, discrete tomography, quantum computing, algorithmic game theory

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Education

2005	**Habilitation**, *University Paris-Sud, Orsay*.
1994–1997	**Doctor in Computer Science**, *University Paris-Sud, Orsay*.
1993–1994	**Master in Computer Science**, *University Paris-Sud*.
1991–1994	**Undergraduate in Computer Science**, *University Paris-Sud*.
1987–1990	**State-certified Computer Scientist**, *Akademie für Datenverarbeitung, Böblingen, Germany*.

Awards

2010	**senior price at EURO/ROADEF challenge**, *I contributed at the beginning, but the price is mainly due to D. Savourey, V. Jost and N. Touati.*
2009	**best paper award in ESA**.
2004	**best paper award in ICALP track A**.

Professional experience

2021–2022	**Senior Researcher at the CNRS**, *University of Chile*.
2011–2021	**Senior Researcher at the CNRS**, *Sorbonne University*.
2007–2014	**Part time teaching assistant at the Ecole Polytechnique**, *Ecole Polytechnique*.
2005–2011	**Junior Researcher at the CNRS**, *Ecole Polytechnique, Palaiseau*.
2004–2005	**Sabbatical at the CNRS**, *Univ. Paris-Sud*.
1999–2004	**Assistant professor at IUT d'Orsay**, *Univ. Paris-Sud*.
1998–1999	**Postdoc**, *Hebrew University of Jerusalem*.
1997–1998	**Postdoc**, *International Computer Science Institute*, Berkeley.
1994–1997	**Teaching assistant at IUT d'Orsay**, *Univ. Paris-Sud*.

1987–1993   **Software development and Hotline**, *several places*, including 2 years fulltime.

Teaching

2019   **Spring school on Optimization and Algorithms in Dynamic Environments**, *Institute of Mathematics (VAST), Hanoi, Vietnam.*

2016–2018   **Dynamic Programming, local search**, *Master STL at the Université Pierre et Marie Curie.*

2018–now   **Advanced Algorithms**, *Master course at the Ecole Centrale-Supelec,* with Nguyen Kim Thang.

2016–now   **Discrete Optimization**, *Master course at the Ecole Centrale-Supelec,* with Spyros Angelopoulos.

since 2002   **Master course**, *on quantum computation, then on scheduling, local search and today algorithms and uncertainty,* MPRI 2-24-2, currently with Spyros Angelopoulos.

2010–2015   **Constraint programming and mathematical programming**, *INF580*, Ecole Polytechnique, course and exercises.

2007–2016   **preparation to programming contests**, Ecole Polytechnique, ENS Cachan, Ecole Centrale.

2006–2007   **TA in Java programming**, *Ecole Polytechnique.*

1999–2004   **course on networking, TA in C++, Java, Human-Interfaces**, *IUT d'Orsay.*

1994–1997   **TA in Cobol, programming projects in C++ and OSF/Motif**, *IUT d'Orsay.*

Invited Talks

2019   **Introduction à l'algorithmique en ligne**, *congrès annuel de la Société française de recherche opérationnelle et d'aide à la décision*, (ROADEF).

2018   **Bijective analysis of online algorithms**, *Mathematical Optimization Theory and Operations Research*, (MOTOR).

2017   **Optimizing with explorable uncertainty**, *The Latin and American Algorithms, Graphs and Optimization Symposium*, (LAGOS).

2014   **Gestion de tampon en ligne: techniques centrales en algorithmique en ligne**, *congrès annuel de la Société française de recherche opérationnelle et d'aide à la décision*, (ROADEF).

2014   **A survey on discrete tomography**, *Conference of the European Chapter on Combinatorial Optimization*, (ECCO).

Students

2016–2020   **Jin Shendan**, *PhD*, Online Algorithms with recourse, with Spyros Angelopoulos.

2016–2017	**Finn Völkel**, *PhD*, Optimization and testing, with Michel Habib, gave up after one year. Today engineer at Google.
2018–2019	**Léo Tible**, *PhD*, Online Learning for Online Optimization, with Nguyen Kim Thang, gave up after one year. Today PhD student at the University Paris-East Créteil.
2011–2014	**Oscar Vasquez**, *PhD*, Job scheduling to balance energy minimization with quality of service, optimization and game theory, Assistant Professor at the University of Santiago, Chile.
2006–2009	**Nguyen Kim Thang**, *PhD*, Pure Equilibria: Existence, Inefficiency and Online Auction, Assistant Professor at the University Evry Val d'Essonne.
2005–2008	**Mathilde Hurand**, *PhD*, A contribution to optimization for Scheduling and some other problems, Engineer at Google.

Besides I supervise in average one master student per year.

Scientific duties

- organization committee for QIP'06, MISTA'07, CTW'09, STACS'12, SEA'15.
- program committee for STACS'06, Renpar'07, WAOA'09, MAPSP'11, STACS'11, ESA'15, IPDPS'19.
- steering commitee for STACS 2016–2021.
- guest editor for three special editions in Theory of Computing Systems (selected papers from STACS)
- participation in many PhD and habilitation jurys, and as a referee
- Maintaining the *scheduling zoo*, a web page allowing to search papers on scheduling problem.

Administrative duties

2019	**Head of a jury delivering PhD grants**, *école doctorale EDITE*.
2014?–now	**Study committee of the Master MPRI**.
2013	**manager of a grant on quantum information and communication PEPS ICQ**, *CNRS*.
every year	**serving in 1 or 2 recruiting committees**.
2011–2018	**Head of the Operation Research team**, *LIP6, Sorbonne Université*.
2010–2011	**Head of the Algorithms and Complexity team**, *LIX, Ecole Polytechnique*.

Competitive programming

Since 2007 I am involved in competitive programming. I participate myself in yearly programming competitions such as Google Code Jam, Facebook Hackercup or BattleDev. And I trained students for these competitions, and served for two years as judge in the ICPC/SWERC competition. With Jill-Jênn Vie we write a book on algorithmic puzzles, published in French, simplified and traditional Chinese, as well as in English. In parallel I maintain a Python module called TRYALGO with these codes, and a blog TRYALGO.ORG.

Book

[1] Christoph Dürr and Jill-Jênn Vie. *Programmation Efficace — Les 128 Algorithmes Qu'Il Faut Avoir Compris et Codés en Python au Cours de sa Vie*. Ellipses, 2016.

Journal publications

[2] Marcin Bienkowski, Martin Böhm, Jaroslaw Byrka, Marek Chrobak, Christoph Dürr, Lukáš Folwarczný, Łukasz Jeż, Jiří Sgall, Nguyen Kim Thang, and Pavel Veselý. "New results on multi-level aggregation". en. In: *Theoretical Computer Science* 861 (Mar. 2021), pp. 133–143. ISSN: 03043975.

[3] Christoph Dürr and Shahin Kamali. "Randomized two-valued bounded delay online buffer management". In: *Operations Research Letters* 49.2 (Mar. 2021), pp. 246–249. ISSN: 01676377.

[4] Marcin Bienkowski, Martin Böhm, Jaroslaw Byrka, Marek Chrobak, Christoph Dürr, Lukáš Folwarczný, Lukasz Jeż, Jiří Sgall, Nguyen Kim Thang, and Pavel Veselý. "Online Algorithms for Multi-Level Aggregation". In: *Operation Research* 68.1 (2020).

[5] Marek Chrobak, Christoph Dürr, Aleksander Fabijan, and Bengt Nilsson. "Online Clique Clustering". In: *Algorithmica* 82 (2020), pp. 938–965.

[6] Christoph Dürr, Thomas Erlebach, Nicole Megow, and Julie Meißner. "An Adversarial Model for Scheduling with Testing". In: *Algorithmica* (2020), pp. 3630–3675.

[7] Spyros Angelopoulos, Christoph Dürr, and Thomas Lidbetter. "The Expanding Search Ratio of a Graph". In: *Discrete Applied Mathematics* 260 (May 2019), pp. 51–65.

[8] Spyros Angelopoulos, Christoph Dürr, Shahin Kamali, Marc Renault, and Adi Rosén. "Online Bin Packing with Advice of Small Size". In: *Theory of Computing Systems* 1–29 (2018).

[9] Christoph Dürr, Zdeněk Hanzálek, Christian Konrad, Yasmina Seddik, René Sitters, Óscar C. Vásquez, and Gerhard Woeginger. "The triangle scheduling problem". In: *Journal of Schedulung* 21.3 (2018), pp. 305–312.

[10] Spyros Angelopoulos, Diogo Arsénio, and Christoph Dürr. "Infinite linear programming and online searching with turn cost". In: *Theoretical Computer Science* 670 (2017), pp. 11–22. ISSN: 0304-3975.

[11] Nikhil Bansal, Christoph Dürr, Nguyen Kim Thang, and Óscar C. Vásquez. "The local–global conjecture for scheduling with non-linear cost". In: *Journal of Scheduling* 20.3 (2017). Publisher: Springer, pp. 239–254.

[12] Christoph Dürr, Oscar C. Vasquez, and Lukasz Jeż. "Mechanism design for aggregating energy consumption and quality of service in speed scaling scheduling". In: *Theoretical Computer Science* 695 (2017), pp. 28–41.

[13] Spyros Angelopoulos, Diogo Arsénio, Christoph Dürr, and Alejandro López-Ortiz. "Multi-processor Search and Scheduling Problems with Setup Cost". In: *Theory of Computing Systems* (2016), pp. 1–34.

[14] Odile Bellenguez-Morineau, Marek Chrobak, Christoph Dürr, and Damien Prot. "A Note on NP-Hardness of Preemptive Mean Flow-Time Scheduling for Parallel Machines". In: *Journal of Scheduling* 18.3 (2015), pp. 299–304.

[15] Christoph Dürr, Lukasz Jeż, and Oscar C. Vasquez. "Scheduling under dynamic speed-scaling for minimizing weighted completion time and energy consumption". In: *Discrete Applied Mathematics* 196 (2015), pp. 20–27.

[16] Marcin Bienkowski, Marek Chrobak, Christoph Dürr, Mathilde Hurand, Artur Jeż, Łukasz Jeż, and Grzegorz Stachowiak. "A Phi-competitive algorithm for collecting items with increasing weights from a dynamic queue". en. In: *Theoretical Computer Science* 475 (Mar. 2013), pp. 92–102. ISSN: 0304-3975.

[17] Marcin Bienkowski, Marek Chrobak, Christoph Dürr, Mathilde Hurand, Artur Jeż, Łukasz Jeż, and Grzegorz Stachowiak. "Collecting Weighted Items from a Dynamic Queue". en. In: *Algorithmica* 65.1 (Jan. 2013), pp. 60–94. ISSN: 1432-0541.

[18] Christoph Dürr and Flavio Guíñez. "The Wide Partition Conjecture and the Atom Problem in Discrete Tomography". In: *Electronic Notes in Discrete Mathematics* 44 (2013), pp. 351–356.

[19] Evripidis Bampis, Christoph Dürr, Fadi Kacem, and Ioannis Milis. "Speed scaling with power down scheduling for agreeable deadlines". In: *Sustainable Computing: Informatics and Systems* 2.4 (2012), pp. 184–189.

[20] Philippe Baptiste, Marek Chrobak, and Christoph Dürr. "Polynomial Time Algorithms for Minimum Energy Scheduling". In: *Journal ACM Transactions on Algorithms* 8.3 (2012), p. 26.

[21] Marek Chrobak, Christoph Dürr, Flavio Guíñez, Antoni Lozano, and Nguyen Kim Thang. "Tile Packing Tomography is NP-hard". In: *Algorithmica* 64.2 (2012), pp. 267–278.

[22] Christoph Dürr, Flavio Guíñez, and Martín Matamala. "Reconstructing 3-Colored Grids from Horizontal and Vertical Projections is NP-Hard: A Solution to the 2-Atom Problem in Discrete Tomography". In: *SIAM J. on Discrete Math* 26.1 (2012), pp. 330–353.

[23] Christoph Dürr, Lukasz Jeż, and Kim Thang Nguyen. "Online Scheduling of Bounded Length Jobs to Maximize Throughput". In: *Journal of Scheduling* 15.5 (2012), pp. 653–664.

[24] Christoph Dürr, Maurice Queyranne, Frits C. R. Spieksma, Fabrice Talla Nobibon, and Gerhard J. Woeginger. "The interval ordering problem". In: *Discrete Applied Mathematics* 160 (2012), pp. 1094–1103.

[25] M. Chrobak, C. Dürr, M. Hurand, and J. Robert. "Algorithms for temperature-aware task scheduling in microprocessor systems". In: *Sustainable Computing: Informatics and Systems* 1.3 (2011). Publisher: Elsevier, pp. 241–247.

[26] Johanne Cohen, Christoph Dürr, and Nguyen Kim Thang. "Non-Clairvoyant Scheduling Games". In: *Theory of Computing Systems* 49.1 (2011), pp. 3–23.

[27] Christoph Dürr and Mathilde Hurand. "Finding total unimodularity in optimization problems solved by linear programs". In: *Algorithmica* 59 (2009), pp. 256–268.

[28] Konstantin Artiouchine, Philippe Baptiste, and Christoph Dürr. "Runway scheduling with holding loop". In: *European Journal of Operational Research* 189.3 (2008), pp. 1254–1266.

[29] Philippe Baptiste, Peter Brucker, Marek Chrobak, Christoph Dürr, Svetlana A. Kravchenko, and Francis Sourd. "The Complexity of Mean Flow Time Scheduling Problems with Release Times". In: *Journal of Scheduling* 10.2 (2007), pp. 139–146.

[30] Wojciech Jawor, Marek Chrobak, and Christoph Dürr. "Competitive Analysis of Scheduling Algorithms for Aggregated Links". In: *Algorithmica* 51 (2007), pp. 367–386.

[31] Marek Chrobak, Christoph Dürr, Wojciech Jawor, Lukasz Kowalik, and Maciej Kurowski. "A Note on Scheduling Equal-Length Jobs to Maximize Throughput". In: *Journal of Scheduling* 9.1 (2006), pp. 71–73.

[32] Christoph Dürr, Mark Heiligman, Peter Høyer, and Mehdi Mhalla. "Quantum query complexity of some graph problems". In: *SIAM J. of Computing* 35.6 (2006), pp. 1310–1328.

[33] Harry Buhrman, Christoph Dürr, Mark Heiligman, Peter Høyer, Frédéric Magniez, Miklos Santha, and Ronald de Wolf. "Quantum Algorithms for Element Distinctness". In: *SIAM Journal on Computing* 34.6 (2005), pp. 1324–1330.

[34] Philippe Baptiste, Marek Chrobak, Christoph Dürr, Wojciech Jawor, and Nodari Vakhania. "Preemptive scheduling of equal-length jobs to maximize weighted throughput". In: *Operations Research Letters* 32.3 (2004), pp. 258–264. ISSN: 0167-6377.

[35] Christoph Dürr, Ivan Rapaport, and Guillaume Theyssier. "Cellular automata and communication complexity". In: *Theoretical Computer Science* 322 (2004). Publisher: Elsevier Science Publishers, pp. 355–368.

[36] Marek Chrobak, Peter Couperus, Christoph Dürr, and Gerhard Woeginger. "On tiling under tomographic constraints". In: *Theoretical Computer Science* 290.3 (2003), pp. 2125–2136. ISSN: 0304-3975.

[37] Christoph Dürr, Eric Goles, Ivan Rapaport, and Eric Rémila. "Tiling with bars under tomographic constraints". In: *Theoretical Computer Science* 290.3 (2003), pp. 1317–1329. ISSN: 0304-3975.

[38] Christoph Dürr and Miklos Santha. "A decision procedure for unitary linear quantum cellular automata". In: *SIAM Journal on Computing* 31.4 (2002), 1076–1089 (electronic). ISSN: 1095-7111.

[39] Marek Chrobak and Christoph Dürr. "Reconstructing polyatomic structures from discrete X-rays: NP-completeness proof for three atoms". In: *Theoretical Computer Science* 259.1-2 (2001), pp. 81–98. ISSN: 0304-3975.

[40] Marek Chrobak and Christoph Dürr. "Reconstructing hv-Convex Polyominoes from Orthogonal Projections". In: *Information Processing Letters* 69 (1999), pp. 283–289.

[41] Christoph Dürr, Huong LêThanh, and Miklos Santha. "A decision procedure for well-formed linear quantum cellular automata". In: *Random Structures & Algorithms* 11.4 (1997), pp. 381–394. ISSN: 1042-9832.

Conference publications

[42] Evripidis Bampis, Christoph Dürr, Thomas Erlebach, Murilo Santos de Lima, Nicole Megow, and Jens Schlöter. "Orienting (Hyper)graphs Under Explorable Stochastic Uncertainty". In: *Proc. of the 29th Annual European Symposium on Algorithms (ESA)*. Vol. 204. Barcelona, Sept. 2021, pp. 1–10.

[43] Spyros Angelopoulos, Christoph Dürr, Shendan Jin, Shahin Kamali, and Marc P. Renault. "Online Computation with Untrusted Advice". In: *11th Innovations in Theoretical Computer Science Conference, ITCS 2020*. Ed. by Thomas Vidick. Vol. 151. LIPIcs. Seattle, Washington, USA: Schloss Dagstuhl - Leibniz-Zentrum für Informatik, Jan. 2020, 52:1–52:15.

[44] Christoph Dürr, Nguyen Kim Thang, Abhinav Srivastav, and Léo Tible. "Non-monotone DR-submodular Maximization over General Convex Sets". In: *Proceedings of the Twenty-Ninth International Joint Conference on Artificial Intelligence, IJCAI 2020*. Ed. by Christian Bessiere. ijcai.org, 2020, pp. 2148–2154.

[45] Spyros Angelopoulos, Christoph Dürr, and Shendan Jin. "Best-Of-Two-Worlds Analysis of Online Search". In: *36th International Symposium on Theoretical Aspects of Computer Science, STACS 2019, March 13-16, 2019, Berlin, Germany*. 2019, 7:1–7:17.

[46] Spyros Angelopoulos, Christoph Dürr, and Shendan Jin. "Online Maximum Matching with Recourse". In: *Proceedings of the International Symposium on Mathematical Foundations of Computer Science (MFCS)*. Aug. 2018.

[47] Christoph Dürr, Thomas Erlebach, Nicole Megow, and Julie Meißner. "Scheduling with Explorable Uncertainty". In: *The 9th Innovations in Theoretical Computer Science Conference (ITCS)*. 2018.

[48] Christoph Dürr, Thomas Erlebach, Nicole Megow, and Julie Meißner. "An Adversarial Model for Scheduling with Testing". In: *Proceedings of the 13th Workshop on Models and Algorithms for Planning and Scheduling Problems (MAPSP)*. 2017, pp. 68–70.

[49] Spyros Angelopoulos, Christoph Dürr, and Thomas Lidbetter. "The Expanding Search Ratio of a Graph". In: *33rd Symposium on Theoretical Aspects of Computer Science, STACS 2016, February 17-20, 2016, Orléans, France*. 2016, 9:1–9:14.

[50] Marcin Bienkowski, Martin Böhm, Jaroslaw Byrka, Marek Chrobak, Christoph Dürr, Lukáš Folwarczný, Lukasz Jeż, Jiří Sgall, Nguyen Kim Thang, and Pavel Veselý. "Online Algorithms for Multi-Level Aggregation". In: *Proc. of the 24th Annual European Symposium on Algorithms (ESA)*. 2016.

[51] Christoph Dürr, Christian Konrad, and Marc Renault. "On the Power of Advice and Randomization for Online Bipartite Matching". In: *Proc. of the 24th Annual European Symposium on Algorithms (ESA)*. 2016.

[52] Spyros Angelopoulos, Christoph Dürr, Shahin Kamali, Marc Renault, and Adi Rosén. "Online Bin Packing with Advice of Small Size". In: *Proc. of the Algorithms and Data Structures Symposium (WADS)*. Lecture Notes in Computer Science. Springer, 2015, pp. 40–53.

[53] Marcin Bienkowski, Jaroslaw Byrka, Marek Chrobak, Christoph Dürr, Lukáš Folwarczný, Lukasz Jeż, Jiří Sgall, Nguyen Kim Thang, and Pavel Veselý. "Online Multilevel Acknowledgment with Bounded Depth". In: *Abstract collection of The 12th Workshop on Models and Algorithms for Planning and Scheduling Problems (MAPSP)*. 2015.

[54] Marek Chrobak, Christoph Dürr, and Bengt Nilsson. "Competitive Strategies for Online Clique Clustering". In: *Proc. of the 9th International Conference on Algorithms and Complexity (CIAC)*. 2015.

[55] Christoph Dürr and Oscar C. Vásquez. "Order constraints for single machine scheduling with non-linear cost". In: *Proceedings of the Sixteenth Workshop on Algorithm Engineering and Experiments (ALENEX)*. Ed. by Catherine C. McGeoch and Ulrich Meyer. 2014, pp. 98–111.

[56] Christoph Dürr and Flavio Guíñez. "The Wide Partition Conjecture and the Atom Problem in Discrete Tomography". In: *Proc. of the VII Latin-American Algorithms, Graphs and Optimization Symposium (LAGOS)*. 2013.

[57] Christoph Dürr, Lukasz Jeż, and Óscar C. Vásquez. "Mechanism design for aggregating energy consumption and quality of service in speed scaling scheduling". In: *Proc. of the 9th Conference on Web and Internet Economics (WINE)*. 2013, pp. 134–145.

[58] Johanne Cohen, Christoph Dürr, and Nguyen Kim Thang. "Smooth Inequalities and Equilibrium Inefficiency in Scheduling Games". In: *Proc. of the 8th Workshop on Internet and Network Economics (WINE)*. Vol. 7695. LNCS. Liverpool: Springer, 2012, pp. 350–363.

[59] Christoph Dürr, Ioannis Milis, Julien Robert, and Georgios Zois. "Approximating the Throughput by Coolest First Scheduling". In: *Proc. of the 10th Workshop on Approximation and Online Algorithms (WAOA)*. 2012.

[60] Marek Chrobak, Christoph Dürr, Flavio Guíñez, Antoni Lozano, and Nguyen Kim Thang. "Tile Packing Tomography is NP-hard". In: *Proc. of the 16th Annual International Computing and Combinatorics Conference (Cocoon)*. 2010, pp. 254–263.

[61] Marcin Bienkowski, Marek Chrobak, Christoph Dürr, Mathilde Hurand, Artur Jeż, Łukasz Jeż, and Grzegorz Stachowiak. "Collecting Weighted Items from a Dynamic Queue". In: *Proceedings of the 2009 Annual ACM-SIAM Symposium on Discrete Algorithms*. Proceedings. Society for Industrial and Applied Mathematics, Jan. 2009, pp. 1126–1135. ISBN: 978-0-89871-680-1.

[62] Christoph Dürr, Flavio Guínez, and Martín Matamala. "Reconstructing 3-colored grids from horizontal and vertical projections is NP-hard". In: *Proc. of the 17th Annual European Symposium on Algorithms (ESA) - best paper award*. 2009.

[63] Christoph Dürr, Lukasz Jeż, and Kim Thang Nguyen. "Online Scheduling of Bounded Length Jobs to Maximize Throughput". In: *Proc. of the 7th Workshop on Approximation and Online Algorithms (WAOA)*. 2009.

[64] Christoph Dürr and Nguyen Kim Thang. "Non-Clairvoyant Scheduling Games". In: *Proc. of the 2nd International Symposium on Algorithmic Game Theory (SAGT)*. 2009.

[65] Marek Chrobak, Christoph Dürr, Mathilde Hurand, and Julien Robert. "Algorithms for Temperature-Aware Task Scheduling in Microprocessor Systems". In: *Proc. of the 4th International Conference on Algorithmic Aspects in Information and Management (AAIM)*. 2008.

[66] Philippe Baptiste, Marek Chrobak, and Christoph Dürr. "Polynomial Time Algorithms for Minimum Energy Scheduling". In: *Proc. of the 15th Annual European Symposium on Algorithms (ESA)*. 2007, pp. 136–150.

[67] Kim Thang Nguyen and Christoph Dürr. "Nash equilibria in Voronoi games on graphs". In: *Proc. of the 15th Annual European Symposium on Algorithms (ESA)*. 2007, pp. 17–28.

[68] Abhinav Bahadur, Christoph Dürr, Raghav Kulkarni, and Thibauly Lafaye. "Quantum Query Complexity in Computational Geometry". In: *Proc. of the Conference on Quantum Information and Computation IV by The International Society for Optical Engineering (SPIE)*. 2006.

[69] Christoph Dürr and Mathilde Hurand. "Finding total unimodularity in optimization problems solved by linear programs". In: *Proc. of the 14th Annual European Symposium on Algorithms (ESA)*. 2006, pp. 315–326.

[70] Wojciech Jawor, Marek Chrobak, and Christoph Dürr. "Competitive Analysis of Scheduling Algorithms for Aggregated Links". In: *Proceedings of Latin American Theoretical INformatics (LATIN)*. 2006, pp. 617–628.

[71] Philippe Baptiste, Marek Chrobak, Christoph Dürr, and Francis Sourd. "Preemptive Multi-Machine Scheduling of Equal-Length Jobs to Minimize the Average Flow Time". In: *Abstract collection of the 7th Workshop on Models and Algorithms for Planning and Scheduling Problems (MAPSP)*. 2005.

[72] Konstantin Artiouchine, Philippe Baptiste, and Christoph Dürr. "Runway scheduling with holding loop". In: *Proceedings of Discrete Optimization Methods in Production and Logistics (DOM)*. 2004, pp. 96–101.

[73] Christoph Dürr, Mark Heiligman, Peter Høyer, and Mehdi Mhalla. "Quantum query complexity of some graph problems". In: *Proceedings of the 31st International Colloquium on Automata, Languages and Programming (ICALP)*. 2004, pp. 481–493.

[74] Harry Buhrman, Christoph Dürr, Mark Heiligman, Peter Høyer, Frédéric Magniez, Miklos Santha, and Ronald de Wolf. "Quantum Algorithms for Element Distinctness". In: *Proc. of the IEEE Conference on Computational Complexity*. 2001, pp. 131–137.

[75] Marek Chrobak and Christoph Dürr. "Reconstructing polyatomic structures from discrete X-rays: NP-completeness proof for three atoms". In: *Proc. of the 23rd International Symposium on Mathematical Foundations of Computer Science (MFCS)*. 1998, pp. 185–193.

[76] Alain Denise, Christoph Dürr, and Fouad Ibn-Majdoub-Hassani. "Enumération et génération aléatoire de polyominos en réseau hexagonal". In: *Proceedings of the 9-th International Conference on Formal Power Series and Algebraic Combinatorics (FPSAC)*. 1997, pp. 222–234.

[77] Christoph Dürr, Huong LêThanh, and Miklos Santha. "A decision procedure for well-formed linear quantum cellular automata". In: *Proc. of the 13rd International Symposium on Theoretical Aspects of Computer Science (STACS)*. 1996, pp. 281–292.

[78] Christoph Dürr and Miklos Santha. "A decision procedure for unitary linear quantum cellular automata". In: *Proc. of the 37th Symposium on Foundations of Computer Science (FOCS)*. 1996, pp. 37–45.