

# List of publications 2008-2014

## Revues internationales avec comité de lecture

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- [1] Michele Flammini, Ralf Klasing, Alfredo Navarra, and Stéphane Pérennes. Tightening the upper bound for the Minimum Energy Broadcasting. *Wireless Networks*, 14(5) :659–669, 2008.
- [2] Michele Flammini, Luca Moscardelli, Alfredo Navarra, and Stéphane Pérennes. Asymptotically optimal solutions for small world graphs. *Theory of Computing Systems*, 42(4) :632–650, May 2008.
- [3] Ralf Klasing, Stéphane Pérennes, and Nelson Morales. On the Complexity of Bandwidth Allocation in Radio Networks. *Theoretical Computer Science*, 406(3) :225–239, October 2008.
- [4] Omid Amini, Florian Huc, and Stéphane Pérennes. On the pathwidth of planar graphs. *SIAM Journal of Discrete Mathematics*, 23(3) :1311–1316, August 2009.
- [5] Omid Amini, Stéphane Pérennes, and Ignasi Sau. Hardness and Approximation of Traffic Grooming. *Theoretical Computer Science*, 410(38-40) :3751–3760, 2009.
- [6] Aubin Jarry and Stéphane Pérennes. Disjoint Path in symmetric Graphs. *Discrete Applied Mathematics*, 157(1) :90–97, 2009.
- [7] Ralf Klasing, Zvi Lotker, Alfredo Navarra, and Stéphane Pérennes. From Balls and Bins to Points and Vertices. *Algorithmic Operations Research*, 4(2) :133–143, 2009.
- [8] Omid Amini, Frédéric Giroire, Florian Huc, and Stéphane Pérennes. Minimal selectors and fault tolerant networks. *Networks*, 55(4) :326–340, 2010.
- [9] Ioannis Caragiannis, Afonso Ferreira, Christos Kaklamanis, Stéphane Pérennes, and Hervé Rivano. Fractional Path Coloring in Bounded Degree Trees with Applications. *Algorithmica*, 58(2) :516–540, 2010.
- [10] Christelle Caillouet, Stéphane Pérennes, and Hervé Rivano. Framework for Optimizing the Capacity of Wireless Mesh Networks. *Computer Communications*, 34(13) :1645–1659, August 2011.
- [11] Omid Amini, David Peleg, Stéphane Pérennes, Ignasi Sau, and Saket Saurabh. On the approximability of some degree-constrained subgraph problems. *Discrete Applied Mathematics*, 160(2) :1661–1679, August 2012.
- [12] Jean-Claude Bermond, David Coudert, Joanna Moulierac, Stéphane Pérennes, Ignasi Sau, and Fernando Solano Donado. GMPLS Label Space Minimization through Hypergraph Layouts. *Theoretical Computer Science*, 444 :3–16, July 2012.
- [13] Jean-Claude Bermond, Michel Cosnard, and Stéphane Pérennes. Directed acyclic graphs with the unique dipath property. *Theoretical Computer Science*, 504 :5–11, September 2013.
- [14] Jean-Claude Bermond, Luisa Gargano, Stéphane Pérennes, Adele Rescigno, and Ugo Vaccaro. Optimal Time Data Gathering in Wireless Networks with Multidirectional Antennas. *Journal of Theoretical Computer Science*, 509 :122–139, October 2013.
- [15] Jean-Claude Bermond, Ralf Klasing, Nelson Morales, Stéphane Pérennes, and Patricio Reyes. Gathering radio messages in the path. *Discrete Mathematics, Algorithms and Applications*, 5(1) :1–28, March 2013.
- [16] Julio Araujo, Nicolas Nisse, and Stéphane Pérennes. Weighted Coloring in Trees. *Siam Journal on Discrete Mathematics*, 28(4) :2029 – 2041, 2014.

- [17] Stéphane Caron, Frédéric Giroire, Dorian Mazauric, Julian Monteiro, and Stéphane Pérennes. P2p storage systems : Study of different placement policies. *Journal of Peer-to-Peer Networking and Applications*, Vol. 7, Issue 4 :427–443, Dec. 2014.
- [18] Frédéric Giroire, Ioannis Lamprou, Dorian Mazauric, Nicolas Nisse, Stéphane Pérennes, and Ronan Soares. Connected surveillance game. *Journal of Theoretical Computer Science*, 2015. To appear.

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- [19] Cristiana Gomes, Stéphane Pérennes, and Hervé Rivano. Bottleneck Analysis for Routing and Call Scheduling in Multi-hop Wireless Networks. In *4th IEEE Workshop on Broadband Wireless Access (BWA)*, pages –, New-Orleans, US, France, December 2008.
- [20] Christelle Molle, Fabrice Peix, Stéphane Pérennes, and Hervé Rivano. Optimal Routing and Call Scheduling in Wireless Mesh Networks with Localized Information. In C. Kaklamanis and F. Nielson, editors, *the fourth Symposium on Trustworthy Global Computing (TGC 2008)*, volume 5474 of *LNCS*, pages 171–185, Barcelona, Spain, November 2008.
- [21] Jean-Claude Bermond, David Coudert, Joanna Moulierac, Stéphane Pérennes, Hervé Rivano, Ignasi Sau, and Fernando Solano Donado. MPLS label stacking on the line network. In Springer, editor, *IFIP Networking*, LNCS 5550/2009, pages 809–820, Aachen, Germany, May 2009.
- [22] Jean-Claude Bermond, David Coudert, Joanna Moulierac, Stéphane Pérennes, Ignasi Sau, and Fernando Solano Donado. Designing Hypergraph Layouts to GMPLS Routing Strategies. In *SIROCCO*, Piran, Slovenia, May 2009.
- [23] Olivier Dalle, Frédéric Giroire, Julian Monteiro, and Stéphane Pérennes. Analysis of Failure Correlation Impact on Peer-to-Peer Storage Systems. In *9th IEEE International Conference on Peer-to-Peer Computing (P2P)*, pages 184–193, Seattle, United States, September 2009.
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- [27] Stephane Caron, Frédéric Giroire, Dorian Mazauric, Julian Monteiro, and Stéphane Pérennes. Data Life Time for Different Placement Policies in P2P Storage Systems. In *Conference on Data Management in Grid and P2P Systems (Globe 2010)*, volume LNCS 6265, pages 75–88, Bilbao, Spain, September 2010.
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- [30] David Coudert, Luc Hogie, Aurélien Lancin, Dimitri Papadimitriou, Stéphane Pérennes, and Issam Tahiri. Feasibility study on distributed simulations of BGP. In *PADS - 26th ACM/IEEE/SCS Workshop on Principles of Advanced and Distributed Simulation - 2012*, Zhangjiajie, Chine, April 2012. IEEE.
- [31] Deepesh Agarwal, Julio Araujo, Christelle Caillouet, Frédéric Cazals, David Coudert, and Stéphane Pérennes. Connectivity Inference in Mass Spectrometry based Structure Determination. In H.L. Bodlaender and G.F. Italiano, editors, *European Symposium on Algorithms*, volume 8125, pages 289–300, Sophia-Antipolis, France, September 2013. Springer.
- [32] Frederic Giroire, Sandeep Kumar Gupta, Remigiusz Modrzejewski, Julian Monteiro, and Stéphane Pérennes. Repair Time in Distributed Storage Systems. In *6th International Conference on Data Management in Cloud, Grid and P2P Systems (Globe 2013)*, volume 8059 of *Data Management in Cloud, Grid and P2P Systems*, pages 99–110, Prague, Czech Republic, August 2013. Springer.
- [33] Frédéric Giroire, Dorian Mazauric, Nicolas Nisse, Stéphane Pérennes, and Ronan Soares. Connected Surveillance Game. In *20th Colloquium on Structural Information and Communication Complexity (SIROCCO)*, volume LNCS 8179 of *Lecture Notes in Computer Science (LNCS)*, pages 68–79, Ischia, Italy, July 2013. Springer.
- [34] Frédéric Giroire, Remigiusz Modrzejewski, Nicolas Nisse, and Stéphane Pérennes. Maintaining Balanced Trees For Structured Distributed Streaming Systems. In *20th Colloquium on Structural Information and Communication Complexity (SIROCCO)*, volume LNCS 8179, pages 177–188, Ischia, Italie, July 2013.
- [35] Frédéric Giroire, Stéphane Pérennes, and Issam Tahiri. On the Hardness of Equal Shortest Path Routing. In *International Network Optimization Conference*, volume 41 of *Electronic Notes in Discrete Mathematics*, pages 439–446, Tenerife, Spain, May 2013. Elsevier.
- [36] Julio Araújo, Nicolas Nisse, and Stéphane Pérennes. Weighted Coloring in Trees. In *31st Symposium on Theoretical Aspects of Computer Science (STACS)*, pages 75–86, Lyon, France, March 2014. Dagstuhl Publishing.
- [37] Frédéric Giroire, Stéphane Pérennes, and Issam Tahiri. Grid spanners with low forwarding index for energy efficient networks. In *INOC 2015 - 7th International Network Optimization Conference*, 2015. to appear.

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- [38] Cristiana Gomes, Stéphane Pérennes, Patricio Reyes, and Hervé Rivano. Bandwidth Allocation in Radio Grid Networks. In *10èmes Rencontres Francophones sur les Aspects Algorithmiques de Télécommunications (AlgoTel'08)*, pages –, Saint Malo, France, May 2008.
- [39] Christelle Molle, Fabrice Peix, Stéphane Pérennes, and Hervé Rivano. Formulation en Coupe/Rounds pour le Routage dans les réseaux radio maillés. In *10èmes Rencontres Francophones sur les Aspects Algorithmiques de Télécommunications*, pages 97–100, St Malo, France, May 2008.
- [40] Olivier Dalle, Frédéric Giroire, Julian Monteiro, and Stéphane Pérennes. Analyse des Corrélations entre Pannes dans les Systèmes de Stockage Pair-à-Pair. In Augustin Chaintreau and Clemence Magnien, editors, *AlgoTel*, Carry-Le-Rouet, France, 2009.

- [41] Stéphane Caron, Frédéric Giroire, Dorian Mazauric, Julian Monteiro, and Stéphane Pérennes. P2P Storage Systems : Data Life Time for Different Placement Policies. In Maria Gradinariu Potop-Butucaru et Hervé Rivano, editor, *12èmes Rencontres Francophones sur les Aspects Algorithmiques de Télécommunications (AlgoTel)*, Belle Dune, France, 2010.
- [42] Philippe Giabbanelli, Dorian Mazauric, and Stéphane Pérennes. Computing the average path length and a label-based routing in a small-world graph. In Maria Gradinariu Potop-Butucaru et Hervé Rivano, editor, *12èmes Rencontres Francophones sur les Aspects Algorithmiques de Télécommunications (AlgoTel)*, page TBA, Belle Dune, France, 2010.
- [43] Julian Monteiro and Stéphane Pérennes. Systèmes de stockage P2P : un guide pratique. In Frédéric Giroire and Dorian Mazauric, editors, *JDIR*, Sophia Antipolis, France, 2010.
- [44] Giroire Frederic, Stéphane Pérennes, and Issam Tahiri. Sur la complexité du routage ospf. In *proceedings of Algotel 2013*, 2013.
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## Thèses

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- [46] Julian Monteiro. *Modélisation et analyse des systèmes de stockage fiable de données dans des réseaux pair-à-pair*. Thèse de doctorat, Université de Nice Sophia-Antipolis, November 2010.
- [47] Stéphane Perennes. *Contributions à l'Algorithmique des réseaux de Télécommunication*. Habilitation à diriger des recherches, Université de Nice, Mars 2010.
- [48] Remigiusz Modrzejewski. *Distribution and storage in networks*. Thèse de doctorat, Université Nice Sophia Antipolis, October 2013.

## Rapports de recherches

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- [49] Omid Amini, David Peleg, Stéphane Pérennes, Ignasi Sau Valls, and Saket Saurabh. Degree-Constrained Subgraph Problems : Hardness and Approximation Results. Research Report RR-6690, 2008.
- [50] Olivier Dalle, Frédéric Giroire, Julian Monteiro, and Stéphane Pérennes. Analysis of Failure Correlation in Peer-to-Peer Storage Systems. Research Report RR-6771, 2008.
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- [55] Jean-Claude Bermond, David Coudert, Joanna Moulierac, Stéphane Pérennes, Ignasi Sau, and Fernando Solano Donado. GMPLS Label Space Minimization through Hypergraph Layouts. Research Report RR-7071, 2009.

- [56] Jean-Claude Bermond, David Coudert, Joanna Moulierac, Stéphane Pérennes, Ignasi Sau Valls, and Fernando Solano Donado. GMPLS Routing Strategies based on the Design of Hypergraph Layouts. Research Report RR-6842, 2009.
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- [59] Stéphane Caron, Frédéric Giroire, Dorian Mazauric, Julian Monteiro, and Stéphane Pérennes. P2P Storage Systems : Data Life Time for Different Placement Policies. Research Report RR-7209, February 2010.
- [60] Frédéric Giroire, Sandeep Kumar Gupta, Remigiusz Modrzejewski, Julian Monteiro, and Stéphane Pérennes. Analysis of the Repair Time in Distributed Storage Systems. Research Report RR-7538, February 2011.
- [61] Issam Tahiri, Stéphane Pérennes, and Frédéric Giroire. A propos de la difficulté du routage égal par plus courts chemins. Rapport de recherche RR-8175, INRIA, December 2012.
- [62] Deepesh Agarwal, Julio Araujo, Christelle Caillouet, Frédéric Cazals, David Coudert, and Stéphane Pérennes. Connectivity Inference in Mass Spectrometry based Structure Determination. Rapport de recherche RR-8320, INRIA, June 2013.
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- [68] David Coudert, Stéphane Pérennes, Hervé Rivano, and Marie-Emilie Voge. Combinatorial optimization in networks with Shared Risk Link Groups. Research Report RR-8575, July 2014.
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