



*Propagation*, Vol. 62, no. 4, p. 1596-1606 (April 2014).  
doi:10.1109/TAP.2013.2284816. <http://hdl.handle.net/2078.1/135678>

11. Gillis, Nicolas ; Glineur, François. *A continuous characterization of the maximum-edge biclique problem*. In: *Journal of Global Optimization*, Vol. 58, no. 3, p. 439-464 (2014).  
doi:10.1007/s10898-013-0053-2. <http://hdl.handle.net/2078.1/127804>
12. Lefèvre, Augustin ; Glineur, François ; Absil, Pierre-Antoine. *A convex formulation for informed source separation in the single channel setting*. In: *Neurocomputing*, no. 141, p. 26-36 (2014). doi:10.1016/j.neucom.2013.12.053. <http://hdl.handle.net/2078.1/141270>
13. Devolder, Olivier ; Glineur, François ; Nesterov, Yurii. *First-Order Methods of Smooth Convex Optimization with Inexact Oracle*. In: *Mathematical Programming*, Vol. 146, no. 1-2, p. 37-75 (2014). doi:10.1007/s10107-013-0677-5. <http://hdl.handle.net/2078.1/127861>
14. Tsiakflakis, Paschalis ; Glineur, François ; Moonen, Marc. *Iterative Convex Approximation Based Real-Time Dynamic Spectrum Management in Multi-User Multi-Carrier Communication Systems*. In: *IEEE Signal Processing Letters*, Vol. 21, no.5, p. 535-539 (May 2014). doi:10.1109/LSP.2014.2308978. <http://hdl.handle.net/2078.1/141275>
15. Tsiakflakis, Paschalis ; Glineur, François ; Moonen, Marc. *Real-time dynamic spectrum management for multi-user multi-carrier communication systems*. In: *IEEE Transactions on Communications*, Vol. 62, no. 3, p. 1124-1137 (2014).  
doi:10.1109/TCOMM.2014.012614.130580. <http://hdl.handle.net/2078.1/141278>
16. Pompili, Filippo ; Gillis, Nicolas ; Absil, Pierre-Antoine ; Glineur, François. *Two algorithms for orthogonal nonnegative matrix factorization with application to clustering*. In: *Neurocomputing*, no. 141, p. 15-25 (2014).  
doi:10.1016/j.neucom.2014.02.018. <http://hdl.handle.net/2078.1/139493>
17. *Regression-Based Polynomial Chaos Expansion*. In: *Communications in Computational Physics*, Vol. 13, no. 4, p. 1173-1188 (2013).  
doi:10.4208/cicp.020911.200412a. <http://hdl.handle.net/2078.1/115779>
18. Wang, T. ; Glineur, François ; Louveaux, Jérôme ; Vandendorpe, Luc. *Weighted Sum Rate Maximization for Downlink OFDMA with Subcarrier-pair based Opportunistic DF Relaying*. In: *IEEE Transactions on Signal Processing*, Vol. 61, no. 10, p. 2512-2524 (May 15 2013). doi:10.1109/TSP.2013.2245326. <http://hdl.handle.net/2078.1/127803>
19. Gillis, Nicolas ; Glineur, François. *A multilevel approach for nonnegative matrix factorization*. In: *Journal of Computational and Applied Mathematics*, Vol. 236, no. 7, p. 1708–1723 (January 2012).  
doi:10.1016/j.cam.2011.10.002. <http://hdl.handle.net/2078.1/105404>
20. Gillis, Nicolas ; Glineur, François. *Accelerated Multiplicative Updates and Hierarchical ALS Algorithms for Nonnegative Matrix Factorization*. In: *Neural Computation*, Vol. 24, no. 4 (April 2012). doi:10.1162/NECO\_a\_00256. <http://hdl.handle.net/2078.1/108506>
21. Devolder, Olivier ; Glineur, François ; Nesterov, Yurii. *Double Smoothing Technique for Large-Scale Linearly Constrained Convex Optimization*. In: *SIAM Journal on Optimization*, Vol. 22, no. 2, p. 702-727 (2012).  
doi:10.1137/110826102. <http://hdl.handle.net/2078.1/110449>
22. Gillis, Nicolas ; Glineur, François. *On the Geometric Interpretation of the Nonnegative Rank*. In: *Linear Algebra and Its Applications*, Vol. 437, no. 11, p. 2685-2712 (2012).  
doi:10.1016/j.laa.2012.06.038. <http://hdl.handle.net/2078.1/110451>

23. Gillis, Nicolas ; Glineur, François. *Low-Rank Matrix Approximation with Weights or Missing Data Is NP-Hard*. In: *SIAM Journal on Matrix Analysis and Applications*, Vol. 32, no. 4, p. 1149–1165 (2011).  
doi:10.1137/110820361. <http://hdl.handle.net/2078.1/105403>
24. Bous, Géraldine ; Fortemps, Philippe ; Glineur, François ; Pirlot, Marc. *ACUTA: A novel method for eliciting additive value functions on the basis of holistic preference statements*. In: *European Journal of Operational Research*, Vol. 206, no. 2, p. 435-444 (Octobre 2010). doi:10.1016/j.ejor.2010.03.009. <http://hdl.handle.net/2078.1/33423>
25. Gillis, Nicolas ; Glineur, François. *Using underapproximations for sparse nonnegative matrix factorization*. In: *Pattern recognition*, Vol. 43, no. 4, p. 1676-1687 (Avril 2010). doi:10.1016/j.patcog.2009.11.013. <http://hdl.handle.net/2078.1/29700>
26. Chares, Robert ; Glineur, François. *An interior-point method for the single-facility location problem with mixed norms using a conic formulation*. In: *Mathematical Methods of Operations Research*, Vol. 68, no. 3, p. 383-405 (Décembre 2008). doi:10.1007/s00186-008-0225-x. <http://hdl.handle.net/2078.1/23486>
27. Glineur, François ; Walhin, Jean-François. *De Finetti's retention problem for proportional reinsurance revisited*. In: *Blätter der DGVM*, Vol. 27, no. 3, p. 451-462 (2006). doi:10.1007/BF02809170. <http://hdl.handle.net/2078.1/94919>
28. Glineur, François ; Terlaky, Tamas. *Conic formulation for lp-norm optimization*. In: *Journal of Optimization Theory and Applications*, Vol. 122, no. 2, p. 285-307 (Août 2004). doi:10.1023/B:JOTA.0000042522.65261.51. <http://hdl.handle.net/2078.1/23485>
29. Glineur, François. *Improving Complexity of Structured Convex Optimization Problems Using Self-concordant Barriers*. In: *European Journal of Operational Research*, Vol. 143, no. 2, p. 291-310 (Décembre 2002). doi:10.1016/S0377-2217(02)00297-7. <http://hdl.handle.net/2078.1/23483>
30. Glineur, François. *Conic optimization: an elegant framework for convex optimization*. In: *Belgian Journal of Operations Research, Statistics and Computer Science*, Vol. 41, no. 1-2, p. 5-28 (2001). <http://hdl.handle.net/2078.1/94921>
31. Glineur, François. *Proving strong duality for geometric optimization using a conic formulation*. In: *Annals of Operations Research*, Vol. 105, no. 1/4, p. 155-184 (2001). doi:10.1023/A:1013357600036. <http://hdl.handle.net/2078.1/94920>
32. Glineur, François. *An extended conic formulation for geometric optimization*. In: *Foundation of Computing and Decision Sciences*, Vol. 25, no. 3, p. 161-174 (2000). <http://hdl.handle.net/2078.1/94922>
33. Glineur, François. *Interior-point methods for linear programming: a guided tour*. In: *Belgian Journal of Operations Research, Statistics and Computer Science*, Vol. 38, no. 1, p. 3-30 (1998). <http://hdl.handle.net/2078.1/94923>

#### **Conference papers (refereed)**

34. Martin, Benoît ; De Rua, Philippe ; De Jaeger, Emmanuel ; Glineur, François. *Loss reduction in a windfarm participating in primary voltage control using an extension of the Convex DistFlow OPF (accepted)*. 20th Power Systems Computation Conference (PSCC) (Dublin, 11/06/2018-15/06/2018) <http://hdl.handle.net/2078.1/195309>
35. Martin, Benoît ; De Jaeger, Emmanuel ; Glineur, François. *A comparison of convex formulations for the joint planning of microgrids*. 24th International Conference &

- Exhibition on Electricity Distribution (CIRED) (Glasgow, 12/06/2017-15/06/2017).  
In: *CIRED, Open Access Proc. J*, Vol. 2017, p. 2174–2178. doi:10.1049/oap-cired.2017.0841. <http://hdl.handle.net/2078.1/195305>
36. Martin, Benoît ; Glineur, François ; De Jaeger, Emmanuel. *A robust convex optimization framework for autonomous network planning under load uncertainty*. IEEE Powertech 2017 (Manchester, 18/06/2017-22/06/2017). In: *Proceedings of 2017 IEEE Manchester PowerTech*, Vol. 2017, p. 1-6.  
doi:10.1109/PTC.2017.7981053. <http://hdl.handle.net/2078.1/195307>
  37. Taylor, Adrien ; Hendrickx, Julien ; Glineur, François. *Performance Estimation Toolbox (PESTO): automated worst-case analysis of first-order optimization methods*. Proceedings of the 56th IEEE Conference on Decision and Control (CDC 2017) (Melbourne (Australia), du 12/12/2017-15/12/2017). In: *Proceedings of the 56th IEEE Conference on Decision and Control (CDC 2017)*, 2017, p. 1278-1283.  
doi:10.1109/CDC.2017.8263832. <http://hdl.handle.net/2078.1/192237>
  38. Martin, Benoît ; De Jaeger, Emmanuel ; Glineur, François ; Latiers, Arnaud. *A dynamic programming approach to multi-period planning of isolated microgrids*. ISESO 2015 (Heidelberg, Germany, 9-10 November 2015). In: *Proceedings of ISESO International Symposium on Energy System Optimization*, 2016. <http://hdl.handle.net/2078.1/173095>
  39. Latiers, Arnaud ; Glineur, François ; De Jaeger, Emmanuel ; Martin, Benoît. *On Decentralized Control of Small Loads and Energy Rebound within Primary Frequency Control*. PSCC 2016 (Genoa, Italy, 20-24 June 2016). In: *Proceedings of the 19th Power Systems Computation Conference*, 2016. <http://hdl.handle.net/2078.1/173092>
  40. Latiers, Arnaud ; Glineur, François ; De Jaeger, Emmanuel. *Energy Limits in Primary Frequency Control with Short-Term Frequency-Band Allocation*. ISGT 2014 (Istanbul, 12 octobre 2014-15 octobre 2014). doi:10.1109/ISGTEurope.2014.7028885 (Accepté/Sous presse). <http://hdl.handle.net/2078.1/143760>
  41. Clavier, Thibault ; Gonzalez Ovejero, David ; De Lera Acedo, Eloy ; Craeye, Christophe ; Ghods, Nima Razavi ; Glineur, François. *Synthesis of non-regular arrays using an FFT-based calculation of the cost function gradient*. EuCAP 2014 (The Hague, The Netherlands, April 2014). In: *Proceedings of the 8th European Conference on Antennas and Propagation*, IEEE, 2014, p. 3326-3330.  
doi:10.1109/EuCAP.2014.6902540. <http://hdl.handle.net/2078.1/154983>
  42. Latiers, Arnaud ; Glineur, François ; De Jaeger, Emmanuel. *Toward semi-autonomous decentralized primary control from demand response*. CIGRE Belgium Conference (Brussels, Belgium, 12/03/2014-14/03/2014). <http://hdl.handle.net/2078.1/143727>
  43. Lefèvre, Augustin ; Glineur, François ; Absil, Pierre-Antoine. *A nuclear-norm based convex formulation for informed source separation*. ESANN 2013 (Bruges, Belgium, du 24/04/2013 au 26/04/2013). In: *Proceedings of the 21st European Symposium on Artificial Neural Networks (ESANN 2013)*, 2013. 9782874190810, 101-106. <http://hdl.handle.net/2078.1/135588>
  44. Lefèvre, Augustin ; Glineur, François. *First-order methods for low-rank matrix factorization applied to informed source separation*. International workshop on regularization, optimization, kernel methods and support vector machines (ROKS 2013) (Leuven, Belgium, du 08/07/2013 au 10/07/2013). <http://hdl.handle.net/2078.1/128638>
  45. Pompili, Filippo ; Gillis, Nicolas ; Absil, Pierre-Antoine ; Glineur, François. *ONP-MF: An Orthogonal Nonnegative Matrix Factorization Algorithm with Application to Clustering*. ESANN 2013 (Bruges, Belgium, du 24/04/2013 au 26/04/2013). In: *Proceedings of the*

- 21st European Symposium on Artificial Neural Networks (ESANN 2013), 2013. 9782874190810, p. 297-302. <http://hdl.handle.net/2078.1/135590>
46. Tsi aflakis, Paschalis ; Glineur, François. *A novel class of iterative approximation methods for DSL spectrum optimization*. IEEE International Conference on Communications (ICC 2012) (Ottawa, Canada, du June 10, 2012 au 15/11/2012). In: , 2012. 978-1-4577-2052-9. doi:10.1109/ICC.2012.6364281. <http://hdl.handle.net/2078.1/108508>
  47. Glineur, François ; Lu, Linzhang ; Van Dooren, Paul ; Wang, Xuansheng. *Extended Lanczos Bidiagonalization for Dimension Reduction in Information Retrieval*. 8th International Conference on Natural Computation (ICNC'12) (Maui, Hawaii, du 29/05/2012 au 31/05/2012). In: *Proceedings*, 2012. 978-1-4577-2133-5 (Accepté/Sous presse). <http://hdl.handle.net/2078.1/109184>
  48. Denies, Jonathan ; Dehez, Bruno ; Glineur, François ; Ben Ahmed, Hamid. *Genetic algorithm-based topology optimization: Performance improvement through dynamic evolution of the population size*. 2012 International Symposium on Power Electronics, Electrical Drives, Automation and Motion (SPEEDAM 2012) (Sorrento, Italy, du 20/06/2012 au 22/06/2012). In: *Proceedings of the International Symposium on Power Electronics, Electrical Drives, Automation and Motion*, 2012. 978-1-4673-1299-8, p. 1033-1038. doi:10.1109/SPEEDAM.2012.6264469. <http://hdl.handle.net/2078.1/113955>
  49. Denies, Jonathan ; Ben Ahmed, Hamid ; Dehez, Bruno ; Glineur, François. *Study of a topology optimization tool associating a hybrid algorithm with a Voronoï-based formalism for the design of electromagnetic devices*. 19th International Conference on Electrical Machines (ICEM 2010) (Rome, Italy, du 06/09/2010 au 08/09/2010). In: *Proceedings of the 19th International Conference on Electrical Machines (ICEM 2010)*, IEEE Press, 2010. doi:10.1109/ICELMACH.2010.5607889. <http://hdl.handle.net/2078.1/87343>
  50. Devolder, Olivier ; Glineur, François ; Nesterov, Yurii. *Convergence of Polynomial Approximations for Infinite-Dimensional Optimization Problems*. 14th Belgian-French-German Conference on Optimization (Leuven, du 14/09/2009 au 18/09/2009). In: *Book of Abstracts of the 14th Belgian-French-German Conference on Optimization*, 2009. 978-90-73802-00-1, p. 103. <http://hdl.handle.net/2078.1/95200>
  51. Berry, Michael W. ; Gillis, Nicolas ; Glineur, François. *Document Classification Using Nonnegative Matrix Factorization and Underapproximation*. 2009 IEEE International Symposium on Circuits and Systems (ISCAS 2009) (Taipei, Taiwan, du 24/05/2009 au 27/05/2009). In: *Proceedings of the IEEE International Symposium on Circuits and Systems (ISCAS)*, 2009. 978-1-4244-3828-0, 2782-2785. <http://hdl.handle.net/2078.1/75088>
  52. Glineur, François. *Quadratic approximation of some convex optimization problems using the arithmetic-geometric mean iteration*. 14th Belgian-French-German Conference on Optimizationhe 14th Belgian-French-German Conference on Optimization (Leuven, du 14/09/2009 au 18/09/2009). In: *Book of Abstracts of the 14th Belgian-French-German Conference on Optimization*, 2009. 978-90-73802-00-1, p. 105. <http://hdl.handle.net/2078.1/95201>
  53. Labbe, Thibaut ; Glineur, François ; Dehez, Bruno. *Topology optimization method applied to the design of electromagnetic devices: focus on convexity issues*. 8th International Symposium on Advanced Electromechanical Motion Systems & Electric Drives Joint Symposium (ELECTROMOTION 2009) (Lille, France, du 01/07/2009 au 03/07/2009). In: *Proceedings of 8th International Symposium on Advanced Electromechanical Motion Systems & Electric Drives Joint Symposium (ELECTROMOTION 2009)*, IEEE, 2009. 978-1-

4244-5150-0, 6 pp..

doi:10.1109/ELECTROMOTION.2009.5259087. <http://hdl.handle.net/2078.1/67581>

54. Labbe, Thibaut ; Dehez, Bruno ; Glineur, François. *Two complementary methods to face with convexity issues in topology optimization problems*. Compumag 2009 (Florianopolis (Brésil), du 22/11/2009 au 26/11/2009). <http://hdl.handle.net/2078.1/70752>
55. Chares, Robert ; Glineur, François. *Variable reduction for interior-point methods using partial minimization*. 14th Belgian-French-German Conference on Optimization (Leuven, du 14/09/2009 au 18/09/2009). In: *Book of Abstracts of the 14th Belgian-French-German Conference on Optimization*, 2009. 978-90-73802-00-1, p. 117. <http://hdl.handle.net/2078.1/95202>

### **Book chapters (refereed unless marked \*)**

56. Martin, Benoît ; De Jaeger, Emmanuel ; Glineur, François ; Latiers, Arnaud. *A dynamic programming approach to multi-period planning of isolated microgrids*. In: V. Bertsch, W. Fichtner, V. Heuveline, T. Leibfried, *Advances in Energy System Optimization (Proceedings of the first International Symposium on Energy System Optimization)*, Springer, 2016, p. 123-137. 978-3-319-51794-0. doi:10.1007/978-3-319-51795-7\_8. <http://hdl.handle.net/2078.1/182213>
57. Glineur, François. *Les méthodes de point intérieur\**. In: J. Teghem, *Recherche opérationnelle - Tome 2 : Gestion de production - Modèles aléatoires - Aide multicritère*, Ellipses, 2013, p. 509-538. 9782729882020. <http://hdl.handle.net/2078.1/135636>
58. Denies, Jonathan ; Dehez, Bruno ; Glineur, François ; Ben Ahmed, Hamid. *Impact of the material distribution formalism on the efficiency of evolutionary methods for topology optimization*. In: M. Diehl, F. Glineur, E. Jarlebring and W. Michiels, *Recent Advances in Optimization and its Applications in Engineering*, Springer: Heidelberg, 2010, p. 489-498. 978-3-642-12597-3. doi:10.1007/978-3-642-12598-0\_40. <http://hdl.handle.net/2078.1/94924>
59. Devolder, Olivier ; Glineur, François ; Nesterov, Yurii. *Solving infinite-dimensional optimization problems by polynomial approximation*. In: M. Diehl, F. Glineur, E. Jarlebring and W. Michiels, *Recent Advances in Optimization and its Applications in Engineering*, Springer: Heidelberg, 2010, p. 37-46. 978-3-642-12597-3. doi:10.1007/978-3-642-12598-0\_3. <http://hdl.handle.net/2078.1/94925>
60. Glineur, François. *Les méthodes de point intérieur\**. In: Jacques Teghem, *Programmation linéaire (Statistique et mathématiques appliquées (co-édité par Éditions de l'Université de Bruxelles ; 978-2729817602))*, Editions Ellipses: Paris, 2003, p. 263-285. 978-2-8004-1317-4. <http://hdl.handle.net/2078.1/94926>

### **Monographs**

61. *Recent Advances in Optimization and its Applications in Engineering*, éd. Diehl, Moritz ; Glineur, François ; Jarlebring, Elias ; Michiels, W., Springer: Heidelberg, 2010. 978-3-642-12597-3. 535 p. <http://hdl.handle.net/2078.1/78057>
62. *Book of Abstracts of the 14th Belgian-French-German Conference on Optimization*, éd. De Schutter, J. ; Diehl, Moritz ; Glineur, François, Katholieke Universiteit Leuven: Heverlee, 2009. 978-90-73802-00-1. 267 p. <http://hdl.handle.net/2078.1/78229>

## **Theses**

63. *Topics in Convex Optimization: Interior-Point Methods, Conic Duality and Approximations*, doctoral thesis, 218 pages, December 2000, Faculté Polytechnique de Mons
64. *Pattern separation via ellipsoids and conic programming*, D.E.A. thesis., 55 pages, August 1998, Faculté Polytechnique de Mons
65. *Étude des méthodes de point intérieur appliquées à la programmation linéaire and à la programmation semidéfinie*, Master thesis, 81 pages, June 1997, Faculté Polytechnique de Mons.