

# PUBLICATIONS

Sonia Toubaline

## International journals

- [1] Tanya Le Sage, Hervé Borrion and Sonia Toubaline. A user-layered approach for modelling and simulating terrorist attacks. *In International Journal of Critical Infrastructures*, 10(3/4) :398-412, 2014.
- [2] Cristina Bazgan, Sonia Toubaline and Daniel Vanderpooten. Critical edges for the assignment problem : complexity and exact resolution. *In Operations Research Letters*, 41(6) :685-689, 2013.
- [3] Cristina Bazgan, Sonia Toubaline and Daniel Vanderpooten. Critical edges/nodes for minimum spanning tree problem : complexity and approximation. *In Journal of Combinatorial Optimization*, 26(1) :178-189, 2013.
- [4] Cristina Bazgan, Sonia Toubaline and Daniel Vanderpooten. Complexity of determining the most vital elements for the  $p$ -median and  $p$ -center location problems. *In Journal of Combinatorial Optimization*, 25(2) :191-207, 2013.
- [5] Cristina Bazgan, Sonia Toubaline and Daniel Vanderpooten. Efficient determination of the  $k$  most vital edges for the minimum spanning tree problem. *In Computer and Operations Research*, 39(11) :2888-2898, 2012.
- [6] Cristina Bazgan, Sonia Toubaline and Zsolt Tuza. The most vital nodes with respect to Independent Set and Vertex Cover. *In Discrete Applied Mathematics*, 159(17) :1933-1946, 2011.

## International conferences with selection committee (full papers)

- [7] Sonia Toubaline, Pierre-Louis Poirion, Claudia D'Ambrosio and Leo Liberti. Observing the state of a smart grid using bilevel programming. *In Proceeding of the 9<sup>th</sup> Annual International Conference on Combinatorial Optimization and Applications (COCOA'15)*, LNCS 9486, 364-376, 2015.
- [8] Tanya Le Sage, Sonia Toubaline and Hervé Borrion. An object-oriented approach for modelling security scenarios. *In Proceedings of the 15<sup>th</sup> International Conference on Computer Modelling and Simulation (UKSIM)*, 396-400, 2013.
- [9] Sonia Toubaline, Hervé Borrion and Tanya Le Sage. Dynamic generation of event trees for risk modelling of terrorist attacks. *In Proceedings of the 2012 IEEE Conference on Technologies for Homeland Security (IEEE HST'12)*, 111-116, 2012.
- [10] Tanya Le Sage, Hervé Borrion and Sonia Toubaline. A tool-target based approach for simulating a terrorist attack. *In Proceedings of the 2012 IEEE Conference on Technologies for Homeland Security (IEEE HST'12)*, 105-110, 2012.
- [11] Basile Couëtoux, Jérôme Monnot and Sonia Toubaline. Complexity results for the Empire Problem in collection of stars. *In Proceeding of the 6<sup>th</sup> Annual International Conference on Combinatorial Optimization and Applications (COCOA'12)*, LNCS 7402, 73-82, 2012.
- [12] Cristina Bazgan, Sonia Toubaline and Daniel Vanderpooten. Efficient algorithms for finding the  $k$  most vital edges for the minimum spanning tree problem. *In Proceeding of the 5<sup>th</sup> Annual International Conference on Combinatorial Optimization and Applications (COCOA'11)*, LNCS 6831, 126-140, 2011.
- [13] Cristina Bazgan, Sonia Toubaline and Daniel Vanderpooten. Complexity of determining the most vital elements for the 1-median and 1-center location problems. *In Proceeding of the 4<sup>th</sup> Annual International Conference on Combinatorial Optimization and Applications (COCOA'10)*, LNCS 6508, Part I, 237-251, 2010.

- [14] Cristina Bazgan, Sonia Toubaline and Zsolt Tuza. Complexity of most vital nodes for Independent Set on tree structures. *In Proceedings of the 21<sup>st</sup> International Workshop on Combinatorial Algorithms (IWOCA'10)*, LNCS 6460, 154–166, 2010.

### International conferences with selection committee (abstracts)

- [15] Sonia Toubaline, Pierre-Louis Poirion, Claudia D'Ambrosio and Leo Liberti. Monitoring smart grids using bi-level programming. *In Proceedings of the 1<sup>st</sup> International Workshop on Bi-level Programming, IWOBIP 16*, 7-11 March 2016, Monterrey, Mexico.
- [16] Sonia Toubaline, Pierre-Louis Poirion, Claudia D'Ambrosio and Leo Liberti. A tri-level mathematical model for real time control of electrical distribution network. *In Proceedings of the 27<sup>th</sup> European Conference on Operational Research, EURO 2015*, 12-15 July 2015, Glasgow.
- [17] Pierre-Louis Poirion, Sonia Toubaline, Leo Liberti and Claudia D'Ambrosio. A binary bilevel algorithm : application for real time control of a medium voltage electrical network. *In Proceedings of the 22<sup>nd</sup> International Symposium on Mathematical Programming ISMP 2015*, 12-17 July 2015, Pittsburgh.
- [18] Sonia Toubaline, Pierre-Louis Poirion, Leo Liberti and Claudia D'Ambrosio. Real time control of medium voltage electrical distribution networks. *In Proceedings of SIAM Conference on Control & its Applications 2015*, 8-10 July 2015, Paris.
- [19] Pierre-Louis Poirion, Sonia Toubaline, Leo Liberti and Claudia D'Ambrosio. A binary bilevel algorithm : application for real time control of a medium voltage electrical network. *In Proceedings of SIAM Conference on Control & its Applications 2015*, 8-10 July 2015, Paris.
- [20] Sonia Toubaline, Pierre-Louis Poirion, Leo Liberti and Claudia D'Ambrosio. Optimal location of smart technologies within an electrical distribution network. *In Proceedings of INFORMS 2014*, 9-12 November 2014, San Francisco.
- [21] Pierre-Louis Poirion, Sonia Toubaline, Leo Liberti and Claudia D'Ambrosio. A robust optimal placement of smart technologies within an electrical distribution network. *In Proceedings of INFORMS 2014*, 9-12 November 2014, San Francisco.
- [22] Pierre-Louis Poirion, Sonia Toubaline, Claudia D'Ambrosio and Leo Liberti. Localization on smart grids. *In Proceedings of the Workshop Mathematical and Applied Global Optimization 2014 (MAGO'14)*, pages 101-103, 1-4 September 2014, Málaga, Spain.
- [23] Hervé Borron, Timothy Nissen, Sonia Toubaline and Tanya Le Sage. Multi-Criteria Decision-Making Perspective on the Privacy versus Security Conundrum. *In the 22<sup>nd</sup> International Conference on Multiple Criteria Decision Making (MCDM'13)*, 17-21 June 2013, Málaga, Spain.

### National conferences with selection committee (abstracts)

- [24] Sonia Toubaline, Claudia D'Ambrosio, Leo Liberti, Pierre-Louis Poirion, Baruch Schieber and Hadas Shachnai. Complexité du problème Power Edge Set. *Dans les actes de la 17<sup>ème</sup> Conférence de la Société Française de Recherche Opérationnelle et d'Aide à la Décision (ROADEF 16)*, 10-12 Février 2016, Compiègne, France.
- [25] Raouia Taktak, Claudia D'Ambrosio and Sonia Toubaline. Problème de gestion de production électrique à court-terme dans les vallées hydrauliques. *Dans les actes de la 17<sup>ème</sup> Conférence de la Société Française de Recherche Opérationnelle et d'Aide à la Décision (ROADEF 16)*, 10-12 Février 2016, Compiègne, France.
- [26] Leo Liberti, Claudia D'Ambrosio, Pierre-Louis Poirion and Sonia Toubaline. Measuring smart grids. *In Proceeding of the 47<sup>th</sup> Annual Conference of the Italian Operations Research Society (AIRO'15)*, 7-10 September 2015, Pisa.
- [27] Sonia Toubaline, Pierre-Louis Poirion, Leo Liberti and Claudia D'Ambrosio. Localisation de PMUs dans les réseaux de distribution électrique. *Dans les actes de la 16<sup>ème</sup> Conférence de la Société Française de Recherche Opérationnelle et d'Aide à la Décision (ROADEF 15)*, 25-27 Février 2015, Marseille, France.

- 
- [28] Cristina Bazgan, Sonia Toubaline et Daniel Vanderpooten. Détermination des éléments les plus vitaux pour les problèmes 1-médian et 1-centre. *Dans les actes de la 12ème Conférence de la Société Française de Recherche Opérationnelle et d'Aide à la Décision (ROADEF 11)*, 2-4 Mars 2011, Saint Étienne, France.
  - [29] Cristina Bazgan, Sonia Toubaline and Daniel Vanderpooten. Complexity of determining the most vital elements for the 1-median and 1-center location problems. *In the 8<sup>th</sup> French Combinatorial Conference*, 28 Juin-2 Juillet 2010, Paris, France.
  - [30] Cristina Bazgan, Sonia Toubaline et Daniel Vanderpooten. Détermination des éléments les plus vitaux pour le problème d'affectation. *Dans les actes de la 11ème Conférence de la Société Française de Recherche Opérationnelle et d'Aide à la Décision (ROADEF 10)*, 24-26 Février 2010, Toulouse, France.
  - [31] Cristina Bazgan, Sonia Toubaline et Daniel Vanderpooten. Détermination des  $k$  arêtes les plus vitales pour le problème de l'arbre couvrant minimal. *Dans les actes de la 10ème Conférence de la Société Française de Recherche Opérationnelle et d'Aide à la Décision (ROADEF 09)*, 10-12 Février 2009, Nancy, France.