# Publication List
Andrea Caliciotti

## Papers on International Journals

- A. Caliciotti, G. Fasano and M. Roma, Novel preconditioners based on quasi-Newton updates for nonlinear conjugate gradient methods, *Optimization Letters*, vol. 11, pp. 835-853, 2017.
- M. Al-Baali, A. Caliciotti, G. Fasano and M. Roma, Exploiting damped techniques for nonlinear conjugate gradient methods, *Mathematical Methods of Operations Research*, vol. 86, pp. 501-522, 2017.
- A. Caliciotti, G. Fasano and M. Roma, Preconditioned nonlinear conjugate gradient methods based on a modified secant equation, *Applied Mathematics and Computation*, vol. 318, pp. 196-214, 2018.
- A. Caliciotti, G. Fasano, S. G. Nash and M. Roma, An adaptive truncation criterion, for linesearch-based truncated Newton methods in large scale nonconvex optimization, *Operations Research Letters*, vol. 46, pp. 7-12, 2018.
- A. Caliciotti, G. Fasano, S. G. Nash and M. Roma, Data and performance profiles applying an adaptive truncation criterion, within linesearch-based truncated Newton methods, in large scale nonconvex optimization, *Data in Brief*, vol. 17, pp. 246-255, 2018.

## Other Peer Reviewed Papers

- A. Caliciotti, G. Fasano and M. Roma, Preconditioning strategies for nonlinear conjugate gradient methods, based on quasi-Newton updates, *The American Institute of Physics (AIP) Conference Proceedings*, vol. 1776, pp. 0900071-0900074, 2016.
- M. Al-Baali, A. Caliciotti, G. Fasano and M. Roma, Quasi-Newton based preconditioning and damped quasi-Newton schemes, for nonlinear conjugate gradient methods, *Springer Proceedings (PROMS)*, vol. 235, pp. 1-21, 2018.
- A. Caliciotti, Advances in large scale unconstrained optimization: novel preconditioning strategies for Nonlinear Conjugate Gradient methods and new developments in Newton-Krylov methods, *PhD Final Dissertation in Automatica, Bioengineering and Operations Research, XXX Course*, 2018.

# Michele Garraffa

## Publications

Tesi di dottorato *Exact and Heuristic Hybrid Approaches for Scheduling and Clustering Problems*

1. "An exact exponential branch-and-merge algorithm for the single machine total tardiness problem"
   M. Garraffa, L. Shang, F. Della Croce, V. T́kindt.
   **Theoretical Computer Science**, vol.745, pp. 133-149, 2018. *A preliminary version of this work was presented at the conferences Mista 2015, Airo2015 and PMS2016.*

2. "Heuristic approaches for a domestic energy management system" F. Della Croce, C. Borean, M. Garraffa, E. Grasso, F. Salassa.
   **Computers & Industrial Engineering**, vol. 109, p.169-178, 2017. *A preliminary version of this work was presented at the conference AIRO2014*

3. "An exact Semidefnite Programming approach for the Max-Mean Dispersion Problem" M. Garraffa, F.Salassa and F. Della Croce.
   **Journal of Combinatorial Optimization**, vol.32, pp. 1-23. *A preliminary version of this work was presented at the conference AIRO2014*

4. "A hybrid three-phase approach for the Max-Mean Dispersion Problem" F. Della Croce, M. Garraffa, F. Salassa.
   **Computers&OR**, vol. 71, pp. 16-22, 10.1016/j.cor.2016.01.003, 2016. *A preliminary version of this work was presented at the conferences ISCO2014 and AIRO2014.*

5. "The one-dimensional cutting stock problem with sequence dependent cut losses" M. Garraffa, F. Salassa, W. Vancroonenburg, G. Vanden Berghe, T. Wauters.
   **International Transactions in Operational Research**, 10.1111/itor.12095, 2014. *A preliminary version of this work was presented at the conference MISTA2013.*

6. "The Selective Fixing Algorithm for the closest string problem" F. Della Croce and M. Garraffa.
   **Computers&OR**, vol. 41, pp. 24–30, 10.1016/j.cor.2013.07.017, 2014.

# Vittorio Latorre

## ELENCO NUMERATO DELLE PUBBLICAZIONI AI FINI DELLA SELEZIONE

*Pubblicazioni su Riviste Internazionali*

1. V. Latorre, D. Y. Gao. "Efficient Deterministic Algorithm for Huge-Sized Noisy Sensor Localization Problems via Canonical Duality Theory". IEEE Transactions on Cybernetics 2019.
DOI: 10.1109/TCYB.2019.2891112. Disponibile all'indirizzo: `https://ieeexplore.ieee.org/document/8625704`.

2. V.Latorre, H. Habal, H. Graeb, S. Lucidi. "Derivative free methodologies for circuit worst case analysis". Optimization Letters 2019. DOI: https://doi.org/10.1007/s11590-018-1364-5. Disponibile all'indirizzo: `https://link.springer.com/article/10.1007/s11590-018-1364-5`.

3. G. Di Pillo, V. Latorre, S. Lucidi, E. Procacci. "An application of Support Vector Machines to sales forecasting under promotions". 4OR, 2016. DOI: 10.1007/s10288-016-0316-0. Disponibile all'indirizzo: `http://link.springer.com/article/10.1007/s10288-016-0316-0/fulltext.html`.

4. V. Latorre, D. Y. Gao. "Global Optimal Trajectory in Chaos and NP-Hardness". Journal on Bifucation and Chaos, 2016. Disponibile all'indirizzo: `http://www.worldscientific.com/doi/abs/10.1142/S021812741650142X`.

5. A. Ciccazzo, G. Di Pillo V. Latorre. "A SVM Surrogate Model-Based Method for Parametric Yield Optimization". IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2015. DOI: 10.1109/TCAD.2015.2501307. Disponibile all'indirizzo: `http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=7329988`.

6. V. Latorre, D. Y. Gao. "Canonical duality for solving general nonconvex constrained problems". Optimization Letters, 2015.
Disponibile all'indirizzo: `http://link.springer.com/article/10.1007/s11590-015-0860-0`.

7. V. Latorre, S. Sagratella "Canonical Duality Theory Application to Affine Quasi-Variational Inequalities". Journal of Global Optimization, 2014. Disponibile all'indirizzo: `http://link.springer.com/article/10.1007/s10898-014-0236-5`.

8. V. Latorre, D. Y. Gao. "Canonical Dual Solutions to Nonconvex Radial Basis Neural Network Optimization Problem". Neurocomputing, 2014. Disponibile all'indirizzo: `http://www.sciencedirect.com/science/article/pii/S0925231214001672`.

9. A. Ciccazzo, G. Di Pillo, V. Latorre. "Support Vector Machines for Surrogate Modeling of Electronic Circuits". Neural Computing and Applications, 2014. Disponibile all'indirizzo: `http://link.springer.com/article/10.1007%2Fs00521-013-1509-5`.

10. A. Ciccazzo, V. Latorre, G. Liuzzi, S Lucidi, F. Rinaldi. "Derivative-free robust optimization for circuit design". Journal of Optimization Theory and Applications, 2013. Disponibile all'indirizzo: `http://link.springer.com/article/10.1007/s10957-013-0441-2`.

## *Capitoli in Libri*

11. V. Latorre, S. Sagratella, D. Y. Gao. "Canonical Dual Approach for Contact Mechanics Problems with Friction". To appear in Advances in Canonical Duality-Triality Theory: Unified Methodology for Multidisciplinary Study, Springer, 2016.

12. V. Latorre. "Unified Interior Point Methodology for Canonical Duality in Global Optimization". To appear in Advances in Canonical Duality-Triality Theory: Unified Methodology for Multidisciplinary Study, Springer, 2016.

## *Tesi di Dottorato*

13. Neural networks, surrogate models and black box algorithms: theory and applications.

30/05/2019

Il/la Sottoscritto/a _____

codice fiscale:_____

nato/a a _____ (_____) il___/___/___,

residente a _____ prov. _____

indirizzo _____ cap. _____

telefono:_____email_____

DICHIARA:

Il elenco delle pubblicazioni

**1.** Solving constrained OWA aggregation problems with the binomial decomposition framework,
International Journal of Approximate Reasoning [submited on Jan 12nd, 2019, status: under review]
**2.** Simplifying the minimax disparity model for determining OWA weights in large scale problems,
International Conference on Optimization and Decision Science, 2018
3. The binomial decomposition of OWA functions, the 2-additive and 3-additive cases in n dimensions,
International Journal of Intelligent systems, 2018
4.The binomial decomposition of generalized Gini welfare functions, the S-Gini and Lorenzen cases,
Information Sciences, 2018.
5. The soft consensus model in the multidistance framework, Springer, 2018.

e del titolo della tesi: "The algebraic representation of OWA functions in the binomial decomposition
framework and its applications in large-scale problems. "

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**TESI DI DOTTORATO:**

Samà M. (2016) Models and algorithms for the real-time railway and air traffic flow management problems.

**ELENCO PUBBLICAZIONI SU RIVISTE SCIENTIFICHE INDICIZZATE SU SCOPUS/ISI:**

1) Samà, M., D'Ariano, A., Corman, F., Pacciarelli, D., (2018) Coordination of scheduling decisions in the management of airport airspace and taxiway operations, **Transportation Research, Part A**, 114 (B) 398–411.

2) Samà, M., Pellegrini, P., D'Ariano, A., Rodriguez, J., Pacciarelli, D., (2017). On the tactical and operational train routing selection problem. **Transportation Research Part C,** 76 (1) 1-15.

3) Samà, M., D'Ariano, A., Corman, F., Pacciarelli, D., (2017). A variable neighbourhood search for fast train scheduling and routing during disturbed railway traffic situations. **Computer & Operations Research**, 78 (1) 480-499.

4) Samà, M., D'Ariano, A., D'Ariano, P., Pacciarelli, D., (2017). Scheduling models for optimal aircraft traffic control at busy airports: Tardiness, priorities, equity and violations considerations. **OMEGA**, 67 (1) 81-98.

5) Samà, M., D'Ariano, A., Corman, F., Pacciarelli, D., (2017). Metaheuristics for efficient aircraft scheduling and re-routing at busy terminal control areas, **Transportation Research Part C,** 80 (1) 485-511.

6) Corman, F., D'Ariano, A., Marra, A.D., Pacciarelli, D., Samà, M., (2016). Integrating Train Scheduling and Delay Management in Real-time Railway Traffic Control. **Transportation Research Part E**, 105 (1) 213-239.

7) Samà, M., Pellegrini, P., D'Ariano, A., Rodriguez, J., Pacciarelli, D., (2016). Ant colony optimization for the real-time train routing selection problem. **Transportation Research Part B,** 85 (1) 89-108

8) Samà, M., Meloni, C., D'Ariano, A., Corman, F., (2015). A multi-criteria decision support methodology for real-time train scheduling. **Journal of Rail Transport Planning & Management**, 5(3) 146–162

9) Samà, M., D'Ariano, A., D'Ariano, P., Pacciarelli, D., (2015). Air Traffic Optimization Models for Aircraft Delay and Travel Time Minimization in Terminal Control Areas, **Public Transport: Planning and Operations,** 7 (3), 321-337

10) Samà, M., D'Ariano, A., D'Ariano, P., Pacciarelli, D., (2014). Optimal aircraft scheduling and routing at a terminal control area during disturbances, **Transportation Research, Part C**, **47(1)** 61-85.

11) Samà, M., D'Ariano, A., D'Ariano, P., Pacciarelli, D., (2014). Comparing Centralized and Rolling Horizon Approaches for Optimal Aircraft Traffic Control in Terminal Areas, **Transportation Research Record, Journal of the Transportation Research Board**, **2449** 45–52.

12) Samà, M., D'Ariano, A., Pacciarelli, D., (2013). Rolling Horizon Approach for Aircraft Scheduling in the Terminal Control Area of Busy Airports, **Transportation Research, Part E**, **60(1)** 140–155.