

# Publications

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## Books and Dissertations

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- [B1] A. Beghi, L. Finesso, and G. Picci, editors. *Mathematical Theory of Networks and Systems*, Padova, Italy, 1998. Il Poligrafo. Proceedings of the International Symposium on Networks and Systems - MTNS98, held in Padova, Italy, July 1998.
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## International Journal Papers

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- [J1] F. Tinazzi, P. Martin, A. Beghi, F. Marcuzzi, and M. Zigliotto. An integrated framework for virtual prototyping of embedded control software. *Mechatronics*, 43:99–111, 2017.
- [J2] M. Lissandrin, M. Rampazzo, L. Cecchinato, and A. Beghi. Optimal operational efficiency of chillers using oil-free centrifugal compressors. *International Journal of Refrigeration*, 2017. To appear.
- [J3] D. Cuccato, A. Ortolan, A. Beghi, and A. Saccon. Pose and shape decomposition for non-planar quadrilaterals in  $R^3$ . Technical report, Dept. of Information Engineering, University of Padova, 2017.
- [J4] M. Bruschetta, F. Maran, and A. Beghi. A nonlinear, MPC-based motion cueing algorithm for a high performance, 9 dofs dynamic simulator platform. *IEEE Transactions on Control Systems Technology*, 25(2):686–694, 2017.
- [J5] M. Bruschetta, F. Maran, and A. Beghi. A fast implementation of MPC-based motion cueing algorithms for mid-size road vehicle motion simulators. *Vehicle System Dynamics*, 55(6):802–826, 2017.
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- [J7] A. Beghi, A. Cervato, and M. Rampazzo. Remote refrigeration system experiments for control engineering education. *Computer Applications in Engineering Education*, 2017. To appear.
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- [J9] A. Ortolan, J. Belfi, F. Bosi, A. Di Virgilio, N. Beverini, G. Carelli, E. Maccioni, R. Santagata, A. Simonelli, A. Beghi, D. Cuccato, A. Donazzan, and G. Naletto. The GINGER project and status of the GINGERino prototype at LNGS. *Journal of Physics*, 718, 2016. 072003.

- [J10] F. Maran, A. De Simoi, A. Beghi, and M. Bruschetta. Validating Power Management Strategies for hybrid sport motorcycles: A virtual prototyping approach. Technical report, Dept. of Information Engineering, University of Padova, 2016. Submitted to *International Journal of Vehicle Systems Modelling and Testing*.
- [J11] D. Cuccato, A. Saccon, A. Ortolan, and A. Beghi. Computing the laser beam path in optical cavities: An approach based on geometric Newton’s method. *Journal of Optimization Theory and Applications*, 171(1):297–315, 2016.
- [J12] M. Bruschetta, C. Cenedese, A. Beghi, and F. Maran. A real-time, MPC-based motion cueing algorithm with Look-Ahead and driver characterization. Technical report, Dept. of Information Engineering, University of Padova, 2016. Submitted to *IEEE Transactions on Human-Machine Systems*.
- [J13] A. Beghi, F. Marcuzzi, and M. Rampazzo. A virtual laboratory for the prototyping of cyber-physical systems. *IFAC-PapersOnLine*, 49:63–68, 2016. Special Issue: 11th IFAC Symposium on Advances in Control Education.
- [J14] A. Beghi, R. Brignoli, L. Cecchinato, G. Menegazzo, and M. Rampazzo. A data-driven approach for fault diagnosis in HVAC water chillers. *Control Engineering & Practice*, 53:79–91, 2016.
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- [C5] A. Beghi, V. Coccorese, and A. Portone. Model reduction for electromechanical systems with application to tokamak control. In N. E. Mastorakis and L. A. Pecorelli-Peres, editors, *Advances in Systems Science: Measurements, Circuits and Control*, Electrical and Computer Engineering Series, pages 382–387. WSEAS Press, 2001.
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## Papers in Proceedings of International Conferences

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- [P1] G. A. Susto, A. Beghi, and M. Terzi. Anomaly detection approaches for semiconductor manufacturing. In *Proceedings of the 27th International Conference on Flexible Automation and Intelligent Manufacturing, FAIM 2017*, 2017. To appear.
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- [P3] G. A. Susto and A. Beghi. Deep learning for virtual metrology: Modeling with optical emission spectroscopy data. Technical report, Dept. of Information Engineering, University of Padova, 2017. Submitted to *2017 IEEE 3rd International Forum on Research and Technologies for Society and Industry (RTSI)*.
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