CURRICULUM VITAE ET STUDIORUM
of
Docent Dr. Carlo Fischione

Associate Professor

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1. Education

- Postdoctoral researcher, University of California at Berkeley, Department of Electrical Engineering and Computer Sciences, Berkeley, CA, May 2007 - September 2008.

- Postdoctoral researcher, KTH Royal Institute of Technology, Automatic Control Group, School of Electrical Engineering, Stockholm, Sweden, May 2005 - May 2007.

- PhD, University of L'Aquila, Italy, May 4, 2005; thesis: "*Performance Analysis of Control Algorithms and Protocols for Wireless Communications*".

- DrEng (Laurea Summa cum Laude, 5/5 years), University of L'Aquila, Italy, April 18, 2001; thesis: "*Analysis of Space-Time Codes for Wireless Communications*".

2. Positions and periods of appointments

- Associate, School of Engineering and Applied Sciences, Harvard University, Cambridge, MA, USA, May 2015-December 2015.

- Visiting Professor, Department of Aeronautics and Astronautics and Laboratory of Information and Decision Systems, MIT Massachusetts Institute of Technology, Cambridge, MA, USA, January 2015-December 2015.

- Associate Professor, Automatic Control Laboratory, Electrical Engineering and AC-CESS Linnaeus Centre, KTH Royal Institute of Technology, Stockholm, Sweden, August 2011 –.

- Assistant Professor, Automatic Control Laboratory, Electrical Engineering and AC-CESS Linnaeus Centre, KTH Royal Institute of Technology, Stockholm, Sweden, May 2008 - July 2011.

- Visiting researcher at the University of California at Berkeley, Department of Electrical Engineering and Computer Sciences, Berkeley, CA, October - December 2006.

- Visiting Scholar at the University of California at Berkeley, and Berkeley Wireless Research Center, Department of Electrical Engineering and Computer Sciences, Berkeley, CA, September 2004 - April 2005.

- Research advisor, Center of Excellence Device Embedded Wireless Systems, University of L'Aquila, Italy, October 2005 - .

- PhD student at University of L'Aquila, Electrical and Information Engineering, Italy, March 2002 - May 2005.

- Visiting PhD student at the Royal Institute of Technology (KTH), Department of Signals, Sensors and Systems, Stockholm, Sweden, March - July 2004.

- Didactic Manager of the Telecommunication Engineering courses at the University of L'Aquila, Italy, in charge of industrial relations and didactic support, June 2002 - October 2003.

- Research advisor at the Department of Electrical Engineering, University of L'Aquila, Italy, September - December 2001.

3. **Distinctions**

- Best Paper Award of the "IEEE Sweden VT-COM-IT Chapter" for the paper "Effect of Rayleigh-Lognormal Fading on IEEE 802.15.4 Networks", P. Di Marco, C. Fischione, F. Santucci, K. H. Johansson, in Proc. of *IEEE International Conference on Communications 2013 (IEEE ICC 13)*, Budapest, Hungary, June 2013.

- Best Business Idea Award of the Venture Cup Sweden East, 2010/2011.

- Best Paper Award of the "IEEE International Conference on Mobile Ad-hoc and Sensor Systems (IEEE MASS 09)", for the paper, "A Generalized Markov Model for an Effective Analysis of Slotted IEEE 802.15.4", P. Park, P. Di Marco, P. Soldati, C. Fischione, K. H. Johansson, in Proc. of *IEEE International Conference on Mobile Ad-hoc and Sensor Systems 2009 (IEEE MASS 09)*, Macau SAR, P.R.C., October 2009.

- Best Paper Award of the IEEE Transactions on Industrial Informatics of the year 2007 for the paper "System Level Design for Clustered Wireless Sensor Networks", A. Bonivento, C. Fischione, L. Necchi, F. Pianegiani, A. Sangiovanni-Vincentelli, *IEEE Transactions on Industrial Informatics*, Vol. 3, No. 3, pp. 202–214, August 2007.

- Best Student Paper finalist, "IEEE International Conference on Networking, Sensing and Control (IEEE ICNSC 07)", 2007.

- Best Paper Award in the category Application of the "IEEE International Conference on Mobile Ad-hoc and Sensor Systems (IEEE MASS 05)", 2005.

- Grant of the Center of Excellence *DEWS (Device Embedded Wireless Systems)*, University of L'Aquila, Italy, 2004.
- Grant "Alta Formazione" (Higher Education) of the Abruzzo Region Government, Italy, 2004.
- Award "Ferdinando Filauro" of the University of L'Aquila, Italy, College of Engineering, 2002.
- Grants of the school Istituto Tecnico Industriale Statale "Amedeo di Savoia duca d'Aosta", L'Aquila, Italy, as best student, 1991-1995.

4. **Research projects**

- PRESIDIUM - Privacy Preserving Distributed Optimisation, Swedish Research Council, January 2016 - December 2019.
- Chromous - Cultural Heritage Monitoring via Wireless Sensor Networks, Swedish Research Council, January 2015 - December 2017.
- In-Network Optimisation over Wireless Sensor Networks, Swedish Research Council, January 2012 - December 2014.
- Vinnova-Wireless@KTH Develop LTE for Smart Energy Systems, June 2013 - May 2015.
- Vinnova-Wireless@KTH LTE for Water, June 2014 - May 2015.
- EIT ICT Labs Projects, January 2012 - December 2015.
- HYDROBIONETs (Autonomous Control of Large-scale Water Treatment Plants based on Self-Organized Wireless BioMEM Sensor and Actuator Networks, STREP project, European Union, FP7), October 2011 -
- HYCON2 (Highly-complex and networked control systems, Network of Excellence, European Union, FP7), September 2010 -
- Euro-NF (Design and Engineering of the Next Generation Internet -Towards convergent multi-service networks, Network of Excellence, European Union, FP7), September 2008 - September 2012.
- FeedNetBack (Feedback Design for Wireless Network Systems, STREP project, European Union, FP7), September 2008 - January 2012.
- In-Network Computation over Wireless Sensor Networks, Swedish Research Council, October 2008 - August 2012.
- NSF ITR CHESS (Center for Hybrid and Embedded Software Systems), UC Berkeley, May 2007 - September 2008.
- GSRC (Gigascale Systems Research Center), May 2007 - September 2008.

- HYCON (HYbrid CONtrol: Taming Heterogeneity and Complexity of Networked Embedded Systems, Network of Excellence, European Union, IST program, FP6), September 2004 - May 2007.
- IP RUNES (Reconfigurable Ubiquitous Networked Embedded Systems, Integrated Project, European Commission, IST program, FP6) May 2005 - May 2007.

5. **Professional services**

- Associated Editor of *Elsevir Automatica*, 2014–
- Guest Editor of the *IEEE Transactions on Industrial Informatics*.
- Co-Chair of *IEEE SmartGridComm Symposium on Architectures and Models for the Smart Grid*, Tainan City, Taiwan, November 2012.
- Signal Processing and Information Theory Track Chair, *IEEE International Conference on Distributed Computing in Sensor Systems (IEEE DCOSS '12)*, Hangzhou, China, May 2012.
- Student Activities Chair of *Cyber-Physical System Week 2010*, Stockholm, Sweden.
- Member of the Technical Program Committees of
    - *IEEE International Conference on Distributed Computing in Sensor Systems (IEEE DCOSS '15)*, Fortaleza, Brazil, May 2015.
    - *IEEE Communications Society Conference on Sensor, Mesh and Ad Hoc Communications and Networks (SECON 15)*, Seattle, USA, June 2015.
    - *IEEE International Conference on Communications (ICC 2015) Ad-Hoc and Sensor Networks, Green Communications*, London, UK, 2015.
    - *IFAC European Control Conference (ECC 2015)*, Linz, UK, 2015.
    - *IEEE Research and Technology for Society and Industry (IEEE RTSI) - Special Session on MM-waves Communications*, Turin, Italy, 2015.
    - *ACM 1st International Workshop on Cyber-Physical Systems for Smart Water Networks (CySWater2015)]*, Seattle, WA, US, April 2015.
    - *IEEE International Conference on Distributed Computing in Sensor Systems (IEEE DCOSS '14)*, Marina del Ray, California, May 2014.
    - *35th IEEE Real-Time Systems Symposium, Wireless Sensor Networks Track (IEEE RTSS 2014)*, Rome, Italy, December 3-6, 2014.
    - *2-st IEEE International Conference on Cyber-Physical Systems, Networks, and Applications (IEEE CPSNA 2013)*, Hong Kong, China, August, 2014.
    - *IEEE International Conference on Communications (ICC 2014) Ad-Hoc and Sensor Networks, Green Communications*, Sydney, Australia, 2014.
    - *IFAC European Control Conference (ECC 2014)*, Strasbourg, France, 2014.

- *34th IEEE Real-Time Systems Symposium, Wireless Sensor Networks Track (IEEE RTSS 2013)*, Vancouver, Canada, December 3-6, 2013.
- *1-st IEEE International Conference on Cyber-Physical Systems, Networks, and Applications (IEEE CPSNA 2013)*, Taipei, Taiwan, August, 2013.
- *4-th IEEE Energy Efficiency in Wireless Networks and Wireless Networks for Energy Efficiency Workshop (IEEE E2Net 2013)*, Budapest, Hungary, June 2013.
- *IEEE International Conference on Distributed Computing in Sensor Systems (IEEE DCOSS '13)*, Cambridge, Massachusetts, May 2013.
- *8-th IEEE International Conference on Automation Science and Engineering (IEEE CASE 2012)*, Seoul, Korea, August 2012.
- *IEEE International Conference on Distributed Computing in Sensor Systems (IEEE DCOSS '11)*, Barcelona, Spain, June 2011.
- *IEEE International Conference on Communications (IEEE ICC 2011)*, Kyoto, Japan, June 2011.
- *IEEE 31st International Conference on Distributed Computing Systems (ICDCS 2011)*, Minneapolis, Minnesota, USA, June, 2011.
- *IEEE Wireless Communication and Networking Conference (IEEE WCNC 2011)*, Cancun, Mexico, March 2011.
- *ACM/IEEE International Conference on Information Processing in Sensor Network (IEEE IPSN 2011)*, San Diego, US, April 2011.
- *European Wireless Sensor Networks (EWSN 2011)*, University of Bonn, Bonn, Germany, February 2011.
- Workshop on *Real-World Wireless Sensor Networks (REALWSN'10)*, Colombo, Sri Lanka, December 2010.
- *IEEE International Conference on Distributed Computing in Sensor Systems, (IEEE DCOSS '10)*, Santa Barbara, California, June 2010.
- *ACM/IEEE International Conference on Information Processing in Sensor Network, (IEEE IPSN 2010)*, Stockholm, Sweden, April 2010.
- *IEEE 52nd Global Telecommunications Conference 2008 - Ad-hoc and Sensor Networking Symposium, (IEEE Globecom 09)*, Honolulu, Hawaii, USA, November 2009.
- *IEEE 69th Vehicular Technology Conference, (IEEE VTC2009-Spring)*, Barcelona, Spain, April 2009.
- *IEEE 51st Global Telecommunications Conference 2008 - Ad-hoc and Sensor Networking Symposium, (IEEE Globecom 08)*, New Orleans, LA, USA, November 2008.
- *International Conference on Sensor Technologies and Applications (SENSORCOMM 2008)*, Cap Esterel, France, August 2008.

- *ACM Workshop on Real-World Wireless Sensor Networks (ACM REALWSN'08)*, Glasgow, Scotland, April 2008.
- *5th European Conference on Wireless Sensor Networks (EWSN 2008)*, Bologna, Italy, January 2008.
- *IEEE International Workshop on Cooperative Wireless Communications and Networking (CoNet 2007)*, Jeju Island, Korea, December 2007.
- *IEEE 50th Global Telecommunications Conference 2007 - Ad-hoc and Sensor Networking Symposium (IEEE Globecom 07)*, Washington, DC, USA, November 2007.
- *International Conference on Sensor Technologies and Applications (SENSORCOMM 2007)*, Valencia, Spain, October 2007.
- *4th European Conference on Wireless Sensor Networks (EWSN 2007)* Delft University of Technology, The Netherlands, January 2007.

- Session Chair at the IEEE Global Telecommunication Conference 2006, (IEEE Globecom 2006), San Francisco, November 27 - December 1 2006.

- Review of scientific articles: journals (IEEE Transactions on Automatic Control, IEEE Transactions on Communications, IEEE Transactions on Industrial Electronics, IEEE Transactions on Industrial Informatics, IEEE Transactions on Multimedia, IEEE/ACM Transactions on Networking, IEEE Transactions on Signal Processing, IEEE Transactions on Wireless Communications, IFAC Automatica, IEE Electronic Letters, ACPA Asian Journal of Control, etc.) and conferences (IEEE CDC, IEEE ICC, IEEE Globecom, ACM/IEEE IPSN, etc.).

6. **Teaching, learning, leadership and entrepreneurial education**

- "Leadership Step 2", Personalutbildning vid KTH, 2013, KTH Royal Institute of Technology.

- "Leadership Step 1", Personalutbildning vid KTH, 2012, KTH Royal Institute of Technology.

- LH206V "Teaching and Learning in a Subject Perspective, Advanced Project", 3 hp, Spring 2012, KTH Royal Institute of Technology.

- "Start-up Program 2011", KTH Innovation, 2011-2012, KTH Royal Institute of Technology.

- LH203V "Teaching and Learning in a Subject Perspective", 5 hp, Fall 2010, KTH Royal Institute of Technology.

- LH207V "Research Supervision", 3 hp, Fall 2009, KTH Royal Institute of Technology.

- LH201V "Teaching and Learning in Higher Education", 7.5 hp, Fall 2008, KTH Royal Institute of Technology.

7. **Teaching and didactic experiences**

- Teaching:
  - FEL3245 Principles of Wireless Sensor Networks, Fall 2015, KTH, teaching responsible, Doctoral course.
  - EL2745 Principles of Wireless Sensor Networks, Fall 2015, KTH, teaching responsible, Master course.
  - EL2745 Principles of Wireless Sensor Networks, Fall 2014, KTH, teaching responsible, Master course.
  - EL111X Bachelor Thesis Project Course, Spring 2014, KTH, teaching responsible.
  - EL3XX Network Optimisation , Spring 2014, KTH, teaching responsible, PhD course.
  - EL111X Bachelor Thesis Project Course, Spring 2013, KTH, teaching responsible.
  - EL2745 Principles of Wireless Sensor Networks, Winter 2013, KTH, teaching responsible, Master course.
  - EL111X Bachelor Thesis Project Course, Spring 2012, KTH, teaching responsible.
  - EL2745 Principles of Wireless Sensor Networks, Winter 2012, KTH, teaching responsible, Master course.
  - EL3260 Principles of Wireless Sensor Networks, Fall 2011, KTH, teaching responsible, PhD course.
  - EL111X Bachelor Thesis Project Course, Spring 2011, KTH, teaching responsible.
  - EL111X Bachelor Thesis Project Course, Spring 2010, KTH, teaching responsible.
  - EL2450 Hybrid and Embedded Control Systems, Winter 2010, KTH, teaching responsible, Master course.
  - FEL3700/EL3700 Principles of Wireless Sensor Networks, Fall 2010, KTH, teaching responsible, PhD and Advanced Master course.
  - EL2420 Project Course in Automatic Control, Winter 2010, KTH, teaching consultant, Master course.
  - EL2420 Project Course in Automatic Control, Spring 2009, KTH, teaching responsible, Master course.
  - EL2450 Hybrid and Embedded Control Systems, Winter 2009, KTH, teaching assistant, Master course.
  - FEL3600/EL3600 Wireless Sensor Networks Programming: An Introduction, Fall 2008, KTH, teaching assistant, PhD course.
  - Digital Communications, 2003-04, University of L'Aquila, teaching assistant, Master course.
  - Signal Analysis, 2002-03 and 2001-02, University of L'Aquila, teaching assistant, Master course.

- – Communications Systems, 2002-03, University of L'Aquila, teaching assistant, Master course.
- Supervisor or co-supervisor of eight PhD students (Royal Institute of Technology and University of L'Aquila).
- Supervisor of fifty Master thesis projects.

8. **Industrial consultancies and collaborations**

- Ericsson Research, on wireless networks, in progress.
- Siemens Research, on Long Term Evolution of Cellular Systems for Smart Grids, in progress.
- ABB Research, on wireless sensor networks, in progress.
- United Technology Research Center, on wireless sensor networks, in progress.
- Berkeley Wireless Sensor Network Lab, on wireless sensor networks, 2005-2010.
- Ericsson AB, Core Network Development, on wireless internet cross-layer adaptation, in progress.
- SICS, Swedish Institute for Computes Science, on Contiki Operating System for wireless sensor networks, March 2006.
- Synopsys Ltd. for testing the wireless communication simulation environment "CoCentric System Studio", August 2002 - May 2005.
- Marconi Mobile Access for the implementation of a CoCentric link-level simulation environment of a UMTS chain with spatial channel, September 2002 - December 2003.
- Research center "Scuola Superiore Guglielmo Reiss Romoli (SSGRR)", L'Aquila, Italy, December 2001.

9. **Books**

[B-1] P. C. Weeraddana, M. Codreanu, M. Latva-aho, A. Ephremides and C. Fischione, "A Review of Weighted Sum-Rate Maximization in Wireless Networks", NOW Fundations and Trends, to Appear, 2013.

10. **Book chapters**

[BC-5] P. Millán, C. Vivas, C. Fischione, "Distributed Event-Based Observers for LTI Systems", in *Asynchronous Control for Networked Systems*, M. G. Losada, F. R. Rubio, S. D. Bencomo Eds., Springer, Chapter 8, pp. 182–192, October 2015.

[BC-4] Y. Xu, V. Gupta, C. Fischione, "Distributed Estimation", in *E-Reference Signal Processing*, R. Chellappa and S. Theodoridis Eds., Elzevir, 2013.

[BC-3] C. Fischione, P. Park, P. Di Marco, K. H. Johansson, "Design Principles of Wireless Sensor Networks Protocols for Control Applications", *Wireless Network Based Control*, S. Mazumder Ed., Springer, Chapter 9, pp. 203-237, April 2011.

[BC-2] P. Park, C. Fischione, K. H. Johansson, "Adaptive IEEE 802.15.4 Communication Protocol for Control and Monitoring Applications", *Wireless Network Based Control*, S. Mazumder Ed., Springer, Chapter 11, pp. 271–299, April 2011.

[BC-1] B. Zurita Ares, C. Fischione, K. H. Johansson, "Energy Consumption of Minimum Energy Coding in CDMA Wireless Sensor Networks", in *Wireless Sensor Networks*, Springer-Verlag Lecture Notes in Computer Science, Vol. 4373, pp. 212–227, 2007, also presented to *4th European Conference on Sensor Networks 2007 (EWSN 07)*, Delft, The Netherlands, January 2007.

11. **Peer-reviewed journal articles**

[J-1] M. Gerami, M. Xiao, J. Li, C. Fischione, X. Li, "Repair for Distributed Storage Systems with Packet Erasure Channels and Dedicated Nodes for Repair", *IEEE Transactions on Communications*, Accepted for Publication, 2016, To Appear.

[J-2] H. Shokri, C. Fischione, P. Popovski, M. Zorzi,"Short Range Millimeter Wave Networks: A MAC Layer Perspective", *IEEE Networks Magazine*, Accepted for Publication, To Appear, 2016.

[J-3] H. Shokri-Ghadikolaei, C. Fischione,"The Transitional Behavior of Millimeter Wave Networks and its Impact on the Medium Access Control", *IEEE Transactions on Communications*, Accepted for Publication, To Appear, 2015.

[J-4] Y. Xu, L. Wang, C. Fischione, V. Fodor, "Distributed Spectrum Leasing via Vertical Cooperation in Spectrum Sharing Networks", *IEEE Transactions on Wireless Communications*, Accepted for Publication, To Appear, 2015.

[J-5] R. Du, L. Gkatzikis, C. Fischione, M. Xiao, "An Energy Efficient Sensor Activation Scheme for Water Distribution Netoworks Based on Compressive Sensing", *IEEE Journal on Selected Areas on Communications, Special Issue on Green Communication and Networking*, Accepted for Publication, To Appear, 2015.

[J-6] S. Magnússon, C. Weeraddana, M. G. Rabbat, C. Fischione, "On the Convergence of Alternating Direction Lagrangian Methods for Nonconvex Structured Optimisation Problems", *IEEE Transactions on Control of Network Systems*, Accepted for Publication, to Appear, 2015.

[J-7] H. Shokri-Ghadikolaei, I. Glaropoulos, V. Fodor, C. Fischione, T. Ephremides, "Green Sensing and Access: Energy-Throughput Tradeoffs in Cognitive Networking", *IEEE Communication Magazine*, Accepted for Publication, to Appear, 2015.

[J-8]   M. Jakobsson, S. Magnússon, C. Fischione, C. Weeraddana, "Extensions of Fast-Lipschitz Optimisation ", *IEEE Transactions on Automatic Control*, Accepted for Publication, to Appear, 2015.

[J-9]   P. Di Marco, G. Athanasiou, P. V. Mekikis, C. Fischione, "MAC-aware Routing Metrics for the Internet of Things", *Elsevir Computer Networks*, Accepted for Publication, to Appear, 2015.

[J-10] Y. Xu, C. Fischione, A. Speranzon "Model Based Peer-to-Peer Estimator over Wireless Sensor Networks with Lossy Channels", *Automatica*, Vol. 61, pp 263–273, November 2015.

[J-11] H. Shokri, C. Fischione, G. Fodor, P. Popovski, M. Zorzi,"Millimeter Wave Cellular Networks: A MAC Layer Perspective", *IEEE Transactions on Communications*, Invited Paper, Vol. 63, N. 10, pp. 3437–3458, October 2015.

[J-12] S. Magnússon, C. Weeraddana, C. Fischione, "A Distributed Approach for the Optimal Power Flow Problem Based on ADMM and Sequential Convex Approximations", *IEEE Transactions on Control of Network Systems*, Vol. 2, N. 3, pp. 238–253, September, 2015.

[J-13] A. De Angelis, C. Fischione, "Mobile Node Localization via Pareto Optimisation: Algorithm and Fundamental Performance Limitations", *IEEE Journal on Selected Areas on Communications*, Vol. 33, No. 7, pp. 1288–1303, July 2015.

[J-14] G. Athanasiou, C. Weeraddana, C. Fischione, L. Tassiulas, "Optimizing Client Association in 60GHz Wireless Access Networks", *IEEE/ACM Transactions on Networking*, Vol. 23, No. 3, pp. 836–850, June 2015.

[J-15] H. Shokri-Ghadikolaei, C. Fischione, "Analysis and Optimisation of Distributed Random Sensing Oder in Cognitive Radio Networks", *IEEE Journal on Selected Areas on Communications*, Vol. 33, No. 5, pp. 803–819, May 2015.

[J-16] P. Di Marco, C. Fischione, F. Santucci, K. H. Johansson, "Modeling IEEE 802.15.4 Networks over Fading Channels", *IEEE Transactions on Wireless Communications*, Vol. 13, No. 10, pp. 5366–5381, August 2014.

[J-17] C. Fischione, G. Athanasiou, F. Santucci, "Dynamic Optimisation of Generalized Least Squares Handover Algorithms", *IEEE Transactions on Wireless Communications*, Vol. 13, No. 3, pp. 1235–1249, March 2014.

[J-18   G. Athanasiou, C. Weeraddana, C. Fischione, "Auction-based Resource Allocation in MillimeterWave Wireless Access Networks", *IEEE Communications Letters*, Vol. 17, No. 11, pp. 2108–2111, November 2013.

[J-19] P. Park, S. Coleri Ergen, C. Fischione, A. Sangiovanni-Vincentelli, "Duty-Cycle Optimisation for IEEE 802.15.4 Wireless Sensor Networks", *ACM Transactions on Sensor Networks*, Vol. 10, No. 1, November 2013.

[J-20] C. Fischione, P. Park, S. Coleri Ergen, "Duty-cycle Analytical Modelling and Optimisation in Unslotted IEEE 802.15.4 Wireless Sensor Networks", *Springer Wireless Networks*, Vol. 19, Issue 7, pp. 1691–1707, October 2013.

[J-21] P. Park, C. Fischione, K. H. Johansson, "Modelling and Stability Analysis of Hybrid Multiple Access in IEEE 802.15.4 Protocol", *ACM Transactions on Sensor Networks*, Vol. 9, No. 2, pp. 13:1–13:55, April 2013.

[J-22] U. Tiberi, C. Fischione, M. Di Benedetto, K. H. Johansson, "Energy-efficient Sampling of Networked Control Systems over IEEE 802.15.4 Wireless Networks", *Automatica*, Vol. 49, No. 3, pp. 712–724, March 2013.

[J-23] P. Park, P. Di Marco, C. Fischione, K. H. Johansson, "Modelling and Optimisation of the IEEE 802.15.4 for Timely and Reliable Communications", *IEEE Transactions on Parallel and Distributed Systems*, Vol. 24, No. 3, pp. 550–564, March 2013.

[J-24] P. Di Marco, P. Park, C. Fischione, K. H. Johansson, "Analytical Modeling of Multi-hop IEEE 802.15.4 Networks", *IEEE Transactions on Vehicular Technology*, Vol. 61, No. 7, pp. 3191–3208, September 2012.

[J-25] L. Bao, M. Skoglund, C. Fischione, K. H. Johansson, "Rate Allocation with Power Constraints for Quantized Control over Binary Symmetric Channels", *IEEE Transactions on Signal Processing*, Vol. 60, No. 6, pp. 3188–3202, June 2012.

[J-26] C. Fischione, "Fast-Lipschitz Optimisation with Wireless Sensor Networks Applications", *IEEE Transactions on Automatic Control*, Vol. 56, No. 10, pp. 2319–2331, October 2011.

[J-27] P. Park, C. Fischione, A. Bonivento, K. H. Johansson, A. Sangiovanni-Vincentelli, "Breath: a Self-Adapting Protocol for Industrial Control Applications Using Wireless Sensor Networks", *IEEE Transactions on Mobile Computing*, Vol. 6. N. 6, pp. 821–838, June 2011.

[J-28] C. Fischione, M. D'Angelo, M. Butussi, "Utility Maximization via Power and Rate Allocation with Outage Constraints in Nakagami-Lognormal Channels", *IEEE Transactions on Wireless Communications*, Vol. 10, N. 4, pp. 1108–1120, April 2011.

[J-29] C. Fischione, M. Butussi, K. H. Johansson, M. D'Angelo, "Power and Rate Control with Outage Constraints in CDMA Wireless Networks", *IEEE Transactions on Communications*, Vol. 57, N. 8, pp. 225–229, August 2009.

[J-30] C. Fischione, K. H. Johansson, A. Sangiovanni-Vincentelli, B. Zurita Ares "Energy Consumption of Minimum Energy Coding in CDMA Wireless Sensor Networks", *IEEE Transactions on Wireless Communications*, Vol. 8, N. 2, pp. 985–994, February 2009.

[J-31] A. Speranzon, C. Fischione, K. H. Johansson, A. Sangiovanni-Vincentelli, "A Distributed Minimum Variance Estimator for Sensor Networks", *IEEE Journal on Selected Areas in Communications, special issue on Control and Communications*, Vol. 26, N. 4, pp. 609–621, May 2008.

[J-32] C. Fischione, F. Graziosi, F. Santucci, "Approximation for a Sum of On-Off Log-Normal Processes with Wireless Applications", *IEEE Transactions on Communications*, Vol. 55, pp. 1984–1993, October 2007.

[J-33] A. Bonivento, C. Fischione, L. Necchi, F. Pianegiani, A. Sangiovanni-Vincentelli, "System Level Design for Clustered Wireless Sensor Networks", *IEEE Transactions on Industrial Informatics*, Vol. 3, No. 3, pp. 202–214, August 2007. **Best Paper Award of the IEEE Transactions on Industrial Informatics of the year 2007**.

[J-34] C. Fischione, F. Graziosi, F. Santucci, "Outage Performance of Power Controlled DS CDMA Wireless Systems with Heterogeneous Traffic Sources", *Wireless Personal Communications*, Vol. 24, pp. 171–187, 2003.

[J-35] F. Santucci, G. Durastante, F. Graziosi, C. Fischione, "Power Allocation and Control in Multimedia CDMA Wireless Systems", *Telecommunications Systems*, Vol. 23, pp. 69–94, 2003.

[J-36] Y. Xu, H. Shokri-Ghadikolaei, C. Fischione, "Distributed Association and Relaying in MillimeterWaves Networks", Submitted, 2015.

[J-37] M. Jakobsson, C. Fischione, "Optimality of Radio Power Control Algorithms via Fast-Lipschitz Optimisation ", Submitted, 2015.

[J-38] M. Levorato, C. Weeraddana, C. Fischione, "Distributed Optimisation of Transmission Strategies in Reactive Cognitive Networks", Submitted, 2015.

[J-39] R. Bonetto, Mi. Rossi, S. Tomasin, C. Fischione, "Joint Optimal Pricing and Electrical Efficiency Enforcement for Rational Agents in Micro Grids", Submitted.

[J-40] R. Du, L. Gkatzikis, C. Fischione, M. Xiao, "Sensor Network Lifetime Maximization by Energy Balancing in Water Distribution Network", Submitted, 2015.

[J-41] Y. Xu, H. Shokri-Ghadikolaei, C. Fischione, "Dynamic Distributed Association in MillimeterWave Networks", Submitted, 2015.

[J-42] H. Shokri-Ghadikolaei, X. Jiang, C. Fischione, Z. Pang, "What Is the Right Interference Model in Millimeter Wave Networks", Submitted, 2015.

[J-43] M. da Silva Junior, G. Fodor, C. Fischione, "Spectral Efficient and Fair User Pairing for Full-Duplex Communication in Cellular Networks", Submitted, 2015.

[J-44] Y. Xu, E. Alfonsettti, C. Weeraddana, C. Fischione, "A Semi Distributed Approach for Min-Max Fair Agent-assignment Problem with Privacy Guarantees", Submitted, 2015.

[J-45] S. Zhuo, H. Shokri-Ghadikolaei, C. Fischione, and Z. Wang, "Online Congestion Measurement and Control in Industrial Sensor Networks", Submitted, 2015.

[J-46] L. Gkatzikis, V. Sourlas, C. Fischione, I. Koutsopouos, L. Tassiulas, "In time Content Replication via Clustering in Content-Delivery Networks", Submitted, 2015.

[J-47] L. Gkatzikis, I. Koutsopouos, C. Fischione, "Task Migration and Consolidation Policies for Cloud Computing Systems", Submitted, 2015.

[J-48] C. Fischione, P. Di Marco, "Teaching Wireless Sensor Networks: Fundamental Knowledge Analysis. Part I", Submitted, 2015.

[J-49] C. Fischione, P. Di Marco, "Teaching Wireless Sensor Networks: Course Proposal. Part II", Submitted, 2015.

[J-50] C. Weeraddana, G. Athanasiou, M. Jakobsson, C. Fischione, J. S. Baras, "Per-se Privacy Preserving Distributed Optimisation ", Submitted, 2015.

[J-51] C. Kalalas, L. Gkatzikis, C. Fischione, F. Williams, "Feasibility Study of IEC 61850 Communication Services over Public LTE Infrastructure", Submitted, 2015.

[J-52] H. Shokri-Ghadikolaei, C. Fischione, E. Modiano, "Interference Model Similarity Index", Submitted, 2015.

[J-53] R. Du, L. Gkatzikis, C. Fischione, M. Xiao, "A Sensor Scheduling Protocol for Energy-efficiency and Robustness to Failures ", Submitted, 2015.

[J-54] S. Magnússon, K. Heal, C. Enyioha, N. Li, C. Fischione, V. Tarokh, *On variability of Renewable energy and Online Power Allocation*, Submitted, 2016.

12. Peer-reviewed conferences

[C-110] S. Magnússon, P. C. Weeraddana, C. Fischione, "A Distributed Approach for the Optimal Power Flow Problem Based on ADMM and Sequential Convex Approximations", in Proc. of *IFAC European Control Conference 2016, (ECC 16)*, Aalborgh, Denmark, June 2016.

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16. **Further Information**

- Chair of the PhD student board of the Department of Electrical Engineering, University of L'Aquila, Italy, 2003–2004.

- Ordinary Member of DASP, the Italian academy of history *Deputazione Abruzzese di Storia Patria "Antonio Ludovico Antinori"*, 2002 – .

- Member of IEEE, the *Institute of Electrical and Electronic Engineers*, 2001 – .

Sincerely,

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