MAURO FACCIN
Curriculum Vitæ

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PROFESSIONAL EXPERIENCE

2015 - today	**Universit Catholique de Louvain** (PostDoc) ICTEAM, Big Data Group	Louvain la Neuve, Belgium
2011 - 2015	**ISI Fundation** (Postdoc) Quantum Science & Mathematics of Networks, Data Science	Torino, Italy
2006 - 2011	**Bifi Institute** (PhD)	Zaragoza, Spain

FELLOWSHIPS

2015	MOVE-IN Louvain Fellowship (with support of Marie Curie Actions)

MEMBERSHIP

2015 - today	**Network Science Society**	Member
2014 - today	**Complex Systems Society**	Member
2013 - today	**Frontiers in Quantum Computing**	Review Editor

ORGANIZATION

2 Jun 2014	**Quantum Frontiers for Network Science** Berkeley, California	NetSci

TEACHING

2016	LINMA2111 Algorithms and Complexity Universit Catholique de Louvain	Assistant Professor
2005	Physics and Math at primary school NEST	Hetauda, Nepal
2004	Science Museum INFN	guide Padova, Italy

EDUCATION

2011	**PhD in Physics**	University of Zaragoza
2007	**Master in Physics and Technology**	University of Zaragoza
2005	**MSc in Physics**	University of Padova

PUBLICATIONS

- Chiral Quantum Walks, D. L. Lu, J. D. Biamonte, J. Li, H. Li, T. H. Johnson, V. Bergholm, M. Faccin, Z. Zimboras, R. Laflamme, J. Baugh, and S. Lloyd, Phys. Rev. A 93, 042302, DOI: 10.1103/PhysRevA.93.042302, arXiv: 1405.6209 [quant-ph]

- Community Detection in Quantum Complex Networks, M. Faccin, P. Migda, T. H. Johnson, V. Bergholm, and J. D. Biamonte, Phys. Rev. X 4 (4 2014), p. 041012, DOI: 10.1103/PhysRevX.4.041012, arXiv: 1310.6638 [quant-ph]

- *D*egree Distribution in Quantum Walks on Complex Networks, M. Faccin, T. Johnson, J. Biamonte, S. Kais, and P. Migda, Phys. Rev. X 3 (4 2013), p. 041007, DOI: 10.1103/PhysRevX.3.041007, arXiv: 1305.6078 [quant-ph]

- *Q*uantum Transport Enhancement by Time-Reversal Symmetry Breaking, Z. Zimboras, M. Faccin, Z. Kadar, J. Whitfield, B. Lanyon, and J. Biamonte, Sci. Rep. 3 (2013). Ed. by NPG, p. 2361, DOI: 10.1038/srep02361, arXiv: 1208.4049 [quant-ph]

- *M*S/MS Spectra Interpretation as a Statistical-Mechanics Problem, M. Faccin and P. Bruscolini, Analytical Chemistry 85.10 (2013), pp. 48844892, DOI: 10.1021/ac4005666, arXiv:

- *G*round-state spin logic, J. D. Whitfield, M. Faccin, and J. D. Biamonte, Europhysics Letters 99.5 (2012), p. 57004, DOI: 10.1209/0295-5075/99/57004, arXiv: 1205.1742 [quant-ph]

- *A*nalysis of the equilibrium and kinetics of the ankyrin repeat protein myotrophin, M. Faccin, P. Bruscolini, and A. Pelizzola, The Journal of Chemical Physics 134.7, 075102 (2011), p. 075102, DOI: 10.1063/1.3535562, arXiv: 1103.0216

CONFERENCES

Oral Contributions

10-15 Jan 2015	*Mesoscopic Structures and Diffusion Process Memory*, NetSci-X	Wrocaw
2-6 Jun 2015	*Structural controllability of EEG temporal causal networks*, NetSci	Zaragoza, Spain
22-26 Sep 2014	*Quantum Approaches to Community Detection*, ECCS	Lucca, Italy
12-14 Mar 2014	*Community detection on quantum systems*, CompleNet	Bologna, Italy
22-24 Jan 2014	*Community Detection on Quantum Systems*, BIFI2014 - VI International Conference	Zaragoza, Spain
24-26 May 2013	*Degree distribution in quantum complex networks*, IQC workshop on quantum computation and complex networks	Waterloo, Canada
6-8 Nov 2012	*Ground state spin logic*, Tensor Network States and Algebraic Geometry Workshop	Torino, Italy
2-4 Feb 2011	*Equilibrium and kinetics of the ankyrin repeat protein Myotrophin through a simple statiscical mechanical model*, V BIFI National Conference	Zaragoza, Spain
5-7 Feb 2009	*Bayesian Characterization of Protein Tandem Mass Spectra*, IV BIFI National Conference	Zaragoza, Spain
8-9 May 2008	*Noise description in MSMS mass spectrometry, looking for a de novo sequencing algorithm*, VI Jornadas Aragonesas de Estabilidad y Plegamiento de Protenas	San Sebastian, Spain

Poster Contributions

23-25 Mar 2016	*Memory and Mesoscopic Structures in Diffusion Processes*, Complenet, Dijon, France
7-10 Jul 2010	*Folding Pathways Characterization for Ankyrin Repeat Protein Myotrophin*, IV Spanish Portuguese Biophysical Congress, Zaragoza, Spain
2-6 Jun 2008	*Statistical characterization of fragment ions in MSMS mass spectrometry*, XXI Sitges Conference on Statistical Mechanics: Statistical Mechanics of Molecular Biophysics, Sitges, Spain

SKILLS

Computer Skills

Coding:	Python, C, C++, Matlab, Fortran
Imaging:	Gimp (raster), Inkscape (vectorial), Rawtherapee (raw)
Plotting:	Gnuplot, Matplotlib, Pgfplots(latex)
Shell:	Bash, Ipython/jupyter
Typesetting:	Latex, Libreoffice, Msoffice, Markdown
Versioning:	Git, Subversion, Mercurial
Web:	Html5, Css/scss, Static site generators, Wordpress

Languages

Italian	Mother tongue
English	Fluent
Spanish	Fluent
French	Fair

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