Mauro Faccin
Curriculum Vitæ

Euler Building
4, Avenue Georges Lemaître
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http://maurofaccin.bitbucket.org

Actual Position

BigData Group and ICTEAM Institute at U.C. Louvain
Interests/Research line
- Dynamics on and of complex networks
- Mutual influence of topology and kinetics
- Markovian and non-Markovian dynamics
- Community and block detection

Professional Experience

2015 - today	**PostDoc**	Louvain la Neuve, Belgium
	Université Catholique de Louvain (ICTEAM)	
2011 - 2015	**PostDoc**	Torino, Italy
	ISI Fundation	
2006 - 2011	**PhD**	Zaragoza, Spain
	Bifi Institute	

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	

Committees

2 Jun 2014	**Quantum Frontiers for Network Science**	NetSci 2014, Berkeley, California
	Organizing committee	
21 Sep 2016	**Coarse-graining of Complex Systems**	CCS2016, Amsterdam, Netherlands
	Organizing committee	
30 Nov 2016	**Complex Networks 2016**	Milan, Italy
	Program committee	
15 Dec 2016	**BeNet 2016**	Louvain-la-Neuve, Belgium
	Organizing committee	
29 Nov 2017	**Complex Networks 2017**	Lyon, France
	Program Committee	

Teaching

2016-2017	**LINMA2111 Algorithms and Complexity**	Assistant Professor
	Université Catholique de Louvain	
2005	**Physics and Math at primary school**	Hetauda, Nepal
	NEST	

2004	**guide in Science Museum** Organizer: INFN	Padova, Italy

EDUCATION

2011	**PhD in Physics** supervisor: Pierpaolo Bruscolini	University of Zaragoza
2007	**Master in Physics and Technology** supervisor: Pierpaolo Bruscolini	University of Zaragoza
2005	**MSc in Physics** supervisor: Enzo Orlandini	University of Padova

PUBLICATIONS

Complex Networks: from Classical to Quantum – preprint   arXiv:1702.08459
J. Biamonte, M. Faccin, M. De Domenico

Chiral Quantum Walks   Phys. Rev. A 93, 042302
D. L. Lu, J. D. Biamonte, J. Li, H. Li, T. H. Johnson, V. Bergholm, M. Faccin, Z. Zimborás, R. Laflamme, J. Baugh, and S. Lloyd

Mapping the topography of a protein energy landscape   J. Am. Chem. Soc., 2015, 137 (46), pp 14610–14625
R. D. Hutton, J. Wilkinson, M. Faccin, E. M. Sivertsson, A. Pelizzola, A. R. Lowe, P. Bruscolini, L. S. Itzhaki

Community Detection in Quantum Complex Networks   Phys. Rev. X 4 (4 2014), p. 041012
M. Faccin, P. Migdał, T. H. Johnson, V. Bergholm, and J. D. Biamonte

Degree Distribution in Quantum Walks on Complex Networks   Phys. Rev. X 3 (4 2013), p. 041007
M. Faccin, T. Johnson, J. Biamonte, S. Kais, and P. Migdał

Quantum Transport Enhancement by Time-Reversal Symmetry Breaking   Sci. Rep. 3 (2013). Ed. by NPG, p. 2361
Z. Zimboras, M. Faccin, Z. Kadar, J. Whitfield, B. Lanyon, and J. Biamonte

MS/MS Spectra Interpretation as a Statistical-Mechanics Problem   Analytical Chemistry 85.10 (2013), pp. 4884–4892
M. Faccin and P. Bruscolini

Ground-state spin logic   Europhysics Letters 99.5 (2012), p. 57004
J. D. Whitfield, M. Faccin, and J. D. Biamonte

Analysis of the equilibrium and kinetics of the ankyrin repeat protein myotrophin
The Journal of Chemical Physics 134.7, 075102 (2011), p. 075102
M. Faccin, P. Bruscolini, and A. Pelizzola

CONFERENCES (ORAL CONTRIBUTIONS)

30 Nov-2 Dec 2016	**Behind Communities: Dynamics Define Modules** ComplexNetworks 2016	Milan, Italy
19-22 Sep 2016	**Beyond Communities: Dynamical Markov Modules** CCS 2016	Amsterdam, Netherlands
May 30-June 3 2016	**Mesoscopic Structure And Diffusion Process Memory** NetSci 2016	Seoul, Korea
10-15 Jan 2015	**Mesoscopic Structures and Diffusion Process Memory** NetSci-X 2016	Wrocław, Poland
2-6 Jun 2015	**Structural controllability of EEG temporal causal networks** NetSci 2015	Zaragoza, Spain
22-26 Sep 2014	**Quantum Approaches to Community Detection** ECCS 2014	Lucca, Italy
12-14 Mar 2014	**Community detection on quantum systems** CompleNet 2014	Bologna, Italy
22-24 Jan 2014	**Community Detection on Quantum Systems** BIFI2014	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**	Torino, Italy
	Tensor Network States and Algebraic Geometry Workshop	
2-4 Feb 2011	**Equilibrium and kinetics of the ankyrin repeat protein Myotrophin through a simple statiscical mechanical model**	Zaragoza, Spain
	V BIFI National Conference	
5-7 Feb 2009	**Bayesian Characterization of Protein Tandem Mass Spectra**	Zaragoza, Spain
	IV BIFI National Conference	
8-9 May 2008	**Noise description in MSMS mass spectrometry, looking for a de novo sequencing algorithm**	San Sebastian, Spain
	VI Jornadas Aragonesas de Estabilidad y Plegamiento de Proteínas	

Conferences (Poster Contributions)

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

Computer skills

Coding	**Python, C, C++, Matlab, Fortran**
Shell	**Bash, iPython/Jupyter**
Versioning	**GIT, Subversion, Mercurial**
Plotting	**Gnuplot, Matplotlib, PGFPlots(latex)**
Typesetting	**Latex, LibreOffice, MSOffice, Markdown**
Imaging	**Gimp (Raster), Inkscape (Vectorial), Rawtherapee (RAW)**
Web	**HTML5, CSS/SCSS, static site generators, Wordpress**

Languages

Italian	**Mother tongue**
English	**Fluent**
Spanish	**Fluent**
French	**Fair**

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