

MAURO FACCIN

Curriculum Vitæ

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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 Université Catholique de Louvain (ICTEAM)	Louvain la Neuve, Belgium
2011 - 2015	PostDoc ISI Foundation	Torino, Italy
2006 - 2011	PhD Bifi Institute	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

COMMITTEES

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

REVIEWER

Natural Computing
PRE
Applied Network Science

TEACHING

2015-2017	LINMA2111 Algorithms and Complexity Université Catholique de Louvain	Assistant Professor
2005	Physics and Math at primary school NEST	Hetauda, Nepal
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)

21-24 Mar 2017	Community detection in networks with non-Markovian dynamics	Dubrovnik, Croatia
	ComplexNet 2017	
30 Nov-2 Dec 2016	Behind Communities: Dynamics Define Modules	Milan, Italy
	ComplexNetworks 2016	
19-22 Sep 2016	Beyond Communities: Dynamical Markov Modules	Amsterdam, Netherlands
	CCS 2016	
May 30-June 3 2016	Mesoscopic Structure And Diffusion Process Memory	Seoul, Korea
	NetSci 2016	

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 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 statistical 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 Proteínas	San Sebastian, Spain

CONFERENCES (POSTER CONTRIBUTIONS)

23-25 Mar 2016	Memory and Mesoscopic Structures in Diffusion Processes CompleNet 2016	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

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

Mauro Faccin