MAURO FACCIN
Curriculum Vitæ

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https://maurofaccin.github.io

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 Fundation	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
11 Dec 2018	**Complex Networks 2018** Program Committee	Cambridge, UK

Reviewer

- Natural Computing
- Physical Review E
- Applied Network Science
- Journal of Complex Networks
- Journal of Statistical Mechanics

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

- Entrograms and coarse graining of dynamics on complex networks
  Journal of Complex Networks
  M. Faccin, M.T. Schaub, J-C. Delvenne
- 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 ComplexNet 2017	Dubrovnik, Croatia
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 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 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