

Jacopo Grilli

CONTACT INFORMATION	PhD Student LIPh - Laboratory of Interdisciplinary Physics Department of Physics and Astronomy G. Galilei Università degli Studi di Padova via Marzolo 8, 35131 Padova, Italy	<i>Phone:</i> +39-049-827-7243 <i>Mobile:</i> +39-345-7101575 <i>E-mail:</i> jgrilli@pd.infn.it
PERSONAL	Born in Milan, July 22, 1987. Italian citizen.	
RESEARCH INTERESTS	Statistical mechanics, stochastic processes, evolution, spatial organization of ecosystems, competition for resources, dynamics and stability of ecosystems, food-webs, genome and proteome evolution.	
CURRICULUM VITÆ	- January 2012 to <i>present</i> Ph.D. student in Physics at Università degli Studi di Padova, Padova, Italy. Advisor: Prof A. Maritan - October 2011 to December 2011 Post-Master Scholarship ‘ex 60%’ 2011 at Department of Physics and Astronomy G. Galilei, Università degli Studi di Padova, Padova, Italy under the supervision of Prof A. Maritan. Project title: <i>Field theory for ecological modeling</i>. - October 2009 to July 2011 M.S. in Theoretical Physics at Università degli Studi di Milano after the defense of the thesis <i>A Physics Approach to Biogeography Modeling</i>, under the supervision of Prof A. Maritan and Prof B. Bassetti. Final grade <i>110/110 cum Laude</i>. - October 2006 to October 2009 B.S. in Physics at Università degli Studi di Milano after the defense of the thesis <i>Functional content of genomes, multi-scaling laws and Chinese Restaurant Process</i>, under the supervision of Prof B. Bassetti and Dr M. Cosentino Lagomarsino. Final grade <i>110/110 cum Laude</i>.	
VISITS	- February 20, 2012 to March 31, 2012 Visiting Student at Genomic Physics Group, Genomique des Microorganismes, UMR 7238 CNRS - Université Pierre et Marie Curie, Paris, France. - June 1, 2010 to June 28, 2010 Summer Internship under the supervision of S. Maslov at Department of Condensed Matter Physics, Brookhaven National Laboratory, Upton, NY, USA.	
PUBLICATIONS	[1] J. Grilli, S. Azaele, J.R. Banavar and A. Maritan. Absence of detailed balance in ecology. <i>Europhysics Letters</i> . 100:38002. 2012. doi:10.1209/0295-5075/100/38002 arXiv:1210.5819	

- [2] J. Grilli, S. Azaele, J.R. Banavar and A. Maritan. Spatial aggregation and the species-area relationship across scales. *Journal of Theoretical Biology*. 313:87-97. 2012.
doi:10.1016/j.jtbi.2012.07.030 pmid:22902426 arXiv:1209.3591
- [3] L. Grassi, J. Grilli and M. Cosentino Lagomarsino. Large-scale dynamics of horizontal transfers. *Mobile Genetics Elements*. 2(3):163-167. 2012.
doi:10.4161/mge.21112 pmid:23061026
- [4] J. Grilli, B. Bassetti, S. Maslov and M. Cosentino Lagomarsino. Joint scaling laws in functional and evolutionary categories in prokaryotic genomes. *Nucleic Acids Research*. 40(2):530-540. 2012.
doi:10.1093/nar/gkr711 pmid:21937509 arXiv:1101.5814

SEMINARS,
CONFERENCES
AND SCHOOLS

- November 26 - December 7, 2012
Winter School on Quantitative Systems Biology, Trieste, Italy.
- November 9, 2012
Scientific day in honor of Bruno Bassetti, Milan, Italy.
◊ *Invited speaker: 20 min talk*
- July 23 - August 3, 2012
Summer School “Emergent Order in Biology”, Cargese, France.
◊ *Contribution: Poster*
- June 20 - 22, 2012
XVII Conference on Statistical Physics and Complex Systems, Parma, Italy.
◊ *Contribution: 20 min talk*

LANGUAGES

- Italian, mother tongue
- English, good knowledge

REFERENCES

Amos Maritan

Professor, Department of Physics and Astronomy G. Galilei, Università degli Studi di Padova, Via Marzolo 8, 35131 Padova, Italy

e-mail: amos.maritan@pd.infn.it; phone: +39-049-827-7175

◊ *Amos Maritan was my supervisor during my M.S. thesis and is currently my PhD advisor.*

Marco Cosentino Lagomarsino

CNRS Researcher (CR1), UMR 7238 Genomique des Microorganismes, Université Pierre et Marie Curie, Group Leader of the of the Genomic Physics Group, Campus Cordeliers, Rue de l'Ecole de Medecine 15, 75006 Paris, France

e-mail: marco.cosentino-lagomarsino@upmc.fr; phone: +33-(0)1-44277341

◊ *Marco Cosentino Lagomarsino was my supervisor during my B.S. thesis. I currently collaborate with him.*

Bruno Bassetti

Researcher, Department of Physics and INFN, Università degli Studi di Milano, via
Celoria 16, 20133 Milan, Italy

e-mail: bruno.bassetti@mi.infn.it; phone: +39-02-50317-477

◊ *Bruno Bassetti was my supervisor during both my BS and MS thesis. I currently
collaborate with him.*
