Leonardo Pacciani-Mori

Personal Data

Address: Department of Physics and Astronomy "Galileo Galilei"
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Research experience

1st Apr 2019 - 30th Sep 2019 — Fellow of the Department of Physics, **Harvard University**, Cambridge (MA)
Supervisors: Dr. Andrea Giometto, Prof. Andrew Murray, Prof. David Nelson

1st Oct 2017 - 30th Sep 2020 — Ph.D. student in *Physics*, **University of Padova**, Padova
Supervisor: Prof. Amos Maritan
Co-supervisor: Dr. Samir Suweis

Education

1st Oct 2015 - 26th Sep 2017 — Master's Degree in *Physics*, **University of Padua**, Padua
Theoretical course of study
Thesis: *A physics approach to ecosystem dynamics*
Advisor: Prof. Amos Maritan
Final grade: 110/110 *cum laude*

1st Oct 2012 - 22nd July 2015 — Bachelor's Degree in *Physics*, **University of Padua**, Padua
Thesis: *Curvature effect on patterning dynamics on spherical membranes*
Advisor: Prof. Enzo Orlandini
Final grade: 108/110

Sep 2007 - July 2012 — High school diploma, **Liceo scientifico "G. Castelnuovo"**, Florence
Final essay: *Esoplanetologia*
Final grade: 100/100

Publications

- Pacciani-Mori L., Suweis S. and Maritan A.: *Adaptive consumer-resource models can explain diauxic shifts and the violation of the Competitive Exclusion Principle*, bioRxiv, DOI: 10.1101/385724, December 2018.

Attended conferences, workshops and schools

6th-10th Mar 2019 — **Quinta Conferenza Italiana degli Studenti di Fisica (5th Italian Conference of Physics Students)**
Department of Physics, University of Milan
Contributed talk: Strategie metaboliche adattive: una risposta (apparentemente) semplice ed efficace a molti problemi in ecologia e microbiologia
(Adaptive metabolic strategies: an (apparently) simple and effective answer to many challenging problems in ecology and microbiology)
Contributed poster: Adaptive consumer-resource models can explain diauxic shifts and the violation of the Competitive Exclusion Principle
Website

20th Dec 2018 — **The physics of complex systems IV: from Padova to the rest of the world and back**
Invited talk: Adaptive metabolic strategies: an (apparently) simple and effective answer to many challenging problems in ecology and microbiology

16TH-18TH DEC 2018 **LIPh Winter Workshop 2018**
Hotel Vittoria, Folgaria
Invited talk: ADAPTIVE CONSUMER-RESOURCE MODELS CAN EXPLAIN DIAUXIC SHIFTS AND THE VIOLATION OF THE COMPETITIVE EXCLUSION PRINCIPLE
Website

23RD-28TH SEP 2018 **Conference on Complex Systems 2018**
Vellidio Convention Center, Aristotle University of Thessaloniki
Contributed talk: ADAPTIVE METABOLIC STRATEGIES EXPLAIN DIAUXIC SHIFTS AND PROMOTE SPECIES COEXISTENCE
Website

19TH-20RD SEP 2018 **104° Congresso della Società Italiana di Fisica**
(104th Congress of the Italian Physical Society)
Department of Physics, University of Calabria
Invited talk: FISICA ED ECOSISTEMI: IL DILEMMA DEL RAPPORTO STABILITÀ-BIODIVERSITÀ
(Physics and ecosystems: the dilemma of the stability-biodiversity relationship)
Website

20TH-23RD APR 2018 **Quarta Conferenza Italiana degli Studenti di Fisica**
(4th Italian Conference of Physics Students)
Department of Physics, University of Pisa
Contributed talk: FISICA ED ECOSISTEMI: IL DILEMMA DEL RAPPORTO STABILITÀ-BIODIVERSITÀ
(Physics and ecosystems: the dilemma of the stability-biodiversity relationship)
Website

5TH-7TH APR 2018 **Stochastic Models in Ecology and Evolutionary Biology**
Venetian Institute of Sciences, Letters and Arts, Venice
Contributed talk: THE ROLE OF METABOLIC TRADE-OFFS IN THE ESTABLISHMENT OF BIODIVERSITY

19TH FEB - 16TH MAR 2018 **Spring College on the Physics of Complex Systems**
International Centre for Theoretical Physics, Trieste
Website

7TH-13TH AUG 2017 **32nd International Conference of Physics Students**
University of Turin
Attended as *national delegate* of the Italian Association of Physics Students
Website

11TH-13TH MAY 2017 **Terza Conferenza Italiana degli Studenti di Fisica**
(3rd Italian Conference of Physics Students)
Department of Physics, University of Bari
Attended as *spokesperson of the Local Committee of Padua of the Italian Association of Physics Students*
Website

3RD-6TH OCT 2016 **Venice meeting on fluctuations in small complex systems III**
Venetian Institute of Sciences, Letters and Arts, Venice

22ND-24TH APR 2016 **Seconda Conferenza Italiana degli Studenti di Fisica**
(2nd Italian Conference of Physics Students)
Department of Physics, Univeristy of Turin
Website

AWARDS

Best contributed talk at the 4th Italian Conference of Physics Students.

Best poster at the 5th Italian Conference of Physics Students.

Organized conferences, workshops and schools

Oct 2016 - May 2017 **Sei Spritz Facili**
University of Padua, Department of Physics
Series of six lectures covering the areas over which research is carried out in the Department.
Activity of the Padua Local Committee of the Italian Association of Physics Students

Teaching experience

6th - 13th Dec 2018 **LaTeX for dummies: guida di sopravvivenza per fisici**
(LaTeX for dummies: a survival guide for physicists)
University of Padua, Department of Physics
Introductory 4-lecture course on LaTeX for complete beginners.
Activity of the Padua Local Committee of the Italian Association of Physics Students.
Website

Associations

20th Oct 2018 - Present day **Vicepresident of the Italian Association of Physics Students**

23rd Sep 2018 - Present day **Member of the Complex Systems Society**

1st Oct 2017 - Present day **Secretary of the Italian Association of Physics Students**
Elected during the 3rd Italian Conference of Physics Students

2nd May 2016 - 30th Sep 2017 **President of the Local Committee of Padua of the Italian Association of Physics Students**

26th Feb 2016 - present day **Member of the Italian Association of Physics Students**

Languages

Italian: Native
English: Fluent
Spanish: Decent

Other languages studied in the past:
Japanese, German, Greek (modern), Esperanto (mainly for personal interest and at basic or elementary level).

Computer Skills

Basic knowledge: Office suites (LibreOffice, Excel, Word, PowerPoint), Windows, ROOT
Good knowledge: C++, Python
Advanced knowledge: Linux (Debian and Debian-based distributions), LaTeX, Mathematica