Leonardo Pacciani-Mori

PERSONAL DATA

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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 (Italy)

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 (Italy)

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 (Italy)

Final essay: Esoplanetologia FINAL GRADE: 100/100



- 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

(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

<u>Invited talk:</u> 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, University 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 **ET_FX** for dummies: guida di sopravvivenza per fisici

(ETEX for dummies: a survival guide for physicists)

University of Padua, Department of Physics

Introductory 4-lecture course on **MFX** for complete beginners.

Activity of the Padua Local Committee of the Italian Association of Physics Students.

Website

ASSOCIATIONS

20 TH OCT 2018 - PRESENT DAY	Vicepresident of the Italian	Association of Physics Students
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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

Office suites (LibreOffice, Excel, Word, PowerPoint), WINDOWS, ROOT

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