# Leonardo Pacciani-Mori

## PERSONAL DATA

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#### RESEARCH EXPERIENCE

1<sup>ST</sup> APR 2019 - 30<sup>TH</sup> SEP 2019

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Fellow of the Department of Physics, Harvard University, Cambridge (MA) Supervisors: Dr. Andrea Giometto, Prof. Andrew Murray, Prof. David Nelson I have worked as a visiting graduate student in the groups of Prof. Andrew W. Murray and Prof. David Nelson, supervised by Dr. Andrea Giometto

## **EDUCATION**

1<sup>ST</sup> OCT 2017 - 30<sup>TH</sup> SEP 2020

Ph.D. student in *Physics*, University of Padua, Padua (Italy)

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**Supervisor:** Prof. Amos Maritan **Co-supervisor:** Dr. Samir Suweis

Expected graduation period: December 2020

1<sup>ST</sup> OCT 2015 - 26<sup>TH</sup> 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* 

1<sup>ST</sup> OCT 2012 - 22<sup>ND</sup> JUL 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



## **PUBLICATIONS**

- PACCIANI-MORI L., GIOMETTO A., SUWEIS S. AND MARITAN A.: Adaptive metabolic strategies in consumerresource models, bioRxiv, DOI: 10.1101/385724, August 2018.

## **AWARDS**

Best contributed talk at the 4<sup>th</sup> Italian Conference of Physics Students.

Best poster at the 5<sup>th</sup> 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 informal lectures for the students of Physics and Astronomy, 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

## ATTENDED CONFERENCES, WORKSHOPS AND SCHOOLS

 $6^{TH}$ - $10^{TH}$  Mar 2019 Quinta Conferenza Italiana degli Studenti di Fisica

(5<sup>th</sup> 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

20<sup>TH</sup> DEC 2018 The physics of complex systems IV: from Padova to the rest of the

world and back

Department of Physics, University of Padua

Invited talk: Adaptive metabolic strategies: an (apparently) simple and effective

ANSWER TO MANY CHALLENGING PROBLEMS IN ECOLOGY AND MICROBIOLOGY

16<sup>TH</sup>-18<sup>TH</sup> DEC 2018 LIPh Winter Workshop 2018

Folgaria (Italy)

Invited talk: Adaptive consumer-resource models can explain diauxic shifts and the

VIOLATION OF THE COMPETITIVE EXCLUSION PRINCIPLE

Website

23<sup>RD</sup>-28<sup>TH</sup> 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

19<sup>TH</sup>-20<sup>RD</sup> 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

20<sup>TH</sup>-23<sup>RD</sup> 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

5<sup>TH</sup>-7<sup>TH</sup> 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

19<sup>TH</sup> FEB - 16<sup>TH</sup> MAR 2018 Spring College on the Physics of Complex Systems

International Centre for Theoretical Physics, Trieste

Website

7<sup>TH</sup>-13<sup>TH</sup> AUG 2017 32<sup>nd</sup> International Conference of Physics Students

University of Turin

Attended as national delegate of the Italian Association of Physics Students

Website

11<sup>TH</sup>-13<sup>TH</sup> MAY 2017 Terza Conferenza Italiana degli Studenti di Fisica

(3<sup>rd</sup> 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

3<sup>RD</sup>-6<sup>TH</sup> OCT 2016 Venice meeting on fluctuations in small complex systems III

Venetian Institute of Sciences, Letters and Arts, Venice

22<sup>ND</sup>-24<sup>TH</sup> APR 2016 Seconda Conferenza Italiana degli Studenti di Fisica

(2<sup>nd</sup> Italian Conference of Physics Students)
Department of Physics, University of Turin

Website

## TEACHING EXPERIENCE

 $6^{TH}$  -  $13^{TH}$  Dec 2018 MeV for dummies: guida di sopravvivenza per fisici

(MEX for dummies: a survival guide for physicists)

Department of Physics, University of Padua

Introductory 4-lecture course on MEX for complete beginners, organized by the Padua Local

Committee of the Italian Association of Physics Students.

20<sup>TH</sup> OCT 2018 - PRESENT DAY Vicepresident of the Italian Association of Physics Students

Website

## **SERVICE**

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23 <sup>RD</sup> SEP 2018 - PRESENT DAY	Member of the Complex Systems Society
1 <sup>ST</sup> OCT 2017 - PRESENT DAY	Secretary of the Italian Association of Physics Students Elected during the 3 <sup>rd</sup> Italian Conference of Physics Students
2 <sup>ND</sup> MAY 2016 - 30 <sup>TH</sup> SEP 2017	President of the Local Committee of Padua of the Italian

2<sup>ND</sup> MAY 2016 - 30<sup>TH</sup> SEP 2017 President of the Local Committee of Padua of the Italian

**Association of Physics Students** 

26<sup>TH</sup> FEB 2016 - PRESENT DAY Member of the Italian Association of Physics Students

#### LANGUAGES

ITALIAN: Native
ENGLISH: Fluent
SPANISH: Beginner

Other languages studied in the past (mainly for personal interest and at basic or elementary level):

Japanese, German, Greek (modern), Esperanto.

## IT SKILLS

Basic knowledge: Office suites (LibreOffice, Excel, Word, PowerPoint), WINDOWS, ROOT

Good knowledge: C++, Python

Advanced knowledge: LINUX (Debian and Debian-based distributions), LTFX, Mathematica