

Emanuele PIGANI



PERSONAL DATA

PLACE AND DATE OF BIRTH: San Daniele del Friuli, Italy | 1st May 1995
ADDRESS: Via Vigonovese 98/C, 35020 Padova, Italy
STATUS: Married. Two children.
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RESEARCH

OCT 2021 - PRESENT



Ph.D. Student at **Stazione Zoologica**, Napoli, and Laboratory of Interdisciplinary Physics, **University of Padova**, Padova
Supervisor: Dr. DANIELE IUDICONE
Co-supervisors: Dr. SAMIR SUWEIS, Dr. OLIVIER JAILLON
Research topic: Investigating The Role Of Oceanic Circulation In Plankton Communities' Structure And Functioning

NOV 2020 - SEP 2021



Research Grant on STATISTICAL MECHANICS OF SPATIAL ECOSYSTEMS at the Laboratory of Interdisciplinary Physics, **University of Padova**, Padova
PI: Prof. AMOS MARITAN

JAN 2020 - OCT 2020



Research Grant on OPINION DYNAMICS at the ICT Center of **Fondazione Bruno Kessler**, Trento
PI: Dr. BRUNO LEPRI

EDUCATION

OCT 2017 - OCT 2019



Master's Degree in PHYSICS, **University of Padova**, Padova
Thesis: *Analysis and modelling of information ecosystems*.
Advisor: Prof. SAMIR SUWEIS
Co-Advisors: Dr. CATERINA DE BACCO, Dr. CARLOS ALBERTO PLATA
FINAL GRADE: 110/110
GPA: 29/30

JUL 2019 - SEP 2019



Master Thesis Traineeship at the PHYSICS FOR INFERENCE AND OPTIMISATION GROUP, **Max Planck Institute for Intelligent Systems**, Tübingen
Supervisor: Dr. CATERINA DE BACCO

APR 2018 - SEPT 2018



Erasmus semester at the DEPARTMENT OF PHYSICS AND ASTRONOMY, **Ruprecht-Karls-Universität, University of Heidelberg**, Heidelberg
Theoretical Biophysics, Nonequilibrium Thermodynamics and Statistics, Computational Statistics and Data Analysis, Standard Model.

OCT 2014 - SEPT 2017



Bachelor's Degree in PHYSICS, **University of Padova**, Padova
Thesis: *Applications of Voter Model to Ecosystems*
Advisor: Prof. SAMIR SUWEIS
FINAL GRADE: 107/110
GPA: 28/30

SEPT 2009 - JULY 2014 | High school diploma, **Liceo Scientifico Bertoni**, Udine
Final essay: *A crises can be a blessing.*
FINAL GRADE: 100/100

SELECTED PUBLICATIONS

Science Advances 10 (2024)	E. Pigani , B. Hay Mele, L. Campese, E. Ser-Giacomi, D. Iudicone, S. Suweis <i>Deviation from neutral species abundance distributions unveils geographical differences in the structure of diatom communities.</i>
PNAS 119 (2022)	E. Pigani , D. Sgarbossa, S. Suweis, A. Maritan, S. Azaele <i>Delay effects on the stability of large ecosystems.</i>
Nature communications 12 (2021)	G. Cencetti, G. Santin, A. Longa, E. Pigani , A. Barrat, C. Cattuto, S. Lehmann, B. Lepri. <i>Digital proximity tracing on empirical contact networks for pandemic control.</i>
Physical Review Research 3, 013070 (2021)	C.A. Plata, E. Pigani , S. Azaele, V. Callejas, M.J. Palazzi, A. Solé-Ribalta, S. Meloni, J. Borge-Holthoefer, S. Suweis. <i>Neutral Theory for competing attention in social networks.</i>

CONFERENCES, TALKS AND WORKSHOPS

13 TH JUN 2024	SIFS Young seminars , Italian Society of Statistical Physics, Italy. <i>Invited talk</i>
23 RD - 28 TH JUN 2024	Synergy Summer School: Complexity and emergence in marine ecosystems/seascape , Ischia, Italy.
3 RD - 7 TH JUN 2024	International Physics of Living Systems Annual Meeting , ICTP, Trieste, Italy. <i>Contributed talk</i>
2 ND - 13 TH OCT 2023	Advanced School on Quantitative Principles in Microbial Physiology: from Single Cells to Cell Communities , ICTP, Trieste, Italy. <i>Contributed talk</i>
15 TH - 18 TH MAY 2023	CEODOS and AtlantECO Workshop , Santiago, Chile. <i>Contributed talk</i>
19 TH - 23 RD FEB 2023	LiphLab Winter Workshop 2023 , Gallio, Italy.
14 TH - 15 TH FEB 2023	HFSP Kick-off meeting , Padova, Italy.
1 ST - 3 RD OCT 2022	AtlantECO meeting , Sesimbra, Portugal. <i>Contributed talk</i>
7 TH - 10 TH JUN 2022	Tara Oceans retreat , Niece, France. <i>Contributed talk</i>
30 TH MAR - 2 ND APR 2022	LiphLab Spring Workshop 2022 , Asiago, Italy.
16 TH - 18 TH JUL 2020	LiphLab Winter Workshop 2020 , Folgaria, Italy.
1 ST - 3 RD JULY 2019	First Italian Conference on Complex Systems , Bruno Kessler Foundation, Trento.
16 TH - 18 TH DEC 2018	LiphLab Winter Workshop 2018 , Folgaria, Italy.

TEACHING EXPERIENCES

NOV 2021 - PRESENT	Tenure Teacher of Physics and Math, MIUR, Italy.
OCT 2023 - JUN 2024	Teaching Assistant of Calculus and Physics, School of Agricultural Sciences and Veterinary Medicine, University of Padova, Padova.
OCT 2023 - JAN 2024	Teaching Assistant of Models of Theoretical Physics, Department of Physics and Astronomy, University of Padova, Padova.
OCT 2021 - DEC 2021	Teaching Assistant of Calculus and Physics, School of Agricultural Sciences and Veterinary Medicine, University of Padova, Padova.
OCT 2020 - DEC 2020	Teaching Assistant of Calculus and Physics, School of Agricultural Sciences and Veterinary Medicine, University of Padova, Padova.
NOV 2019 - DEC 2019	High School Math teaching , ISIS "A. Malignani", Udine.