

Curriculum Vitae

Personal information

First name(s) / Surname(s)

Samir Simon Suweis

E-mail

samir.suweis@unipd.it

Occupational field

Complex Systems

Work experience

06/2022 - now
06/2019 - 06/2022
04/2016 – 06/2019
01/2012- 03/2016

Associate Professor, Physics and Astronomy Department, Padova University, Italy.
Assistant Professor (RTDB), Physics and Astronomy Department, Padova University, Italy
Researcher (RTDA), Physics and Astronomy Department, Padova University
Post-Doc Researcher, Physics and Astronomy Department, Padova University..

Education and training

09/2003 -09/2006
10/2006 – 09/2008
10/2008- 12/2011

Bachelor in Physics, Physics and Astronomy Department, Padova University, Italy.
Master in Physics, Physics and Astronomy Department, Padova University, Italy
Ph.D. in Science, Ecole Polytechnique Fédérale de Lausanne, Switzerland

Personal skills and competences

Mother tongue(s)

Specify mother tongue Italian

Other language(s)

Self-assessment

European level (*)

English

French

Understanding		Speaking		Writing	
Listening	Reading	Spoken interaction	Spoken production		
C2	C2	C1	C1	C2	
B2	B2	B1	B1	B1	

(*) [*Common European Framework of Reference for Languages*](#)

Social skills and competences

Highly trained to work in interdisciplinary groups. PI of a group of 7 Ph.D. students and 2 Post. Docs. I've supervised more than 20 bachelors and 15 Master students in their thesis work. I've supervised 3 Ph.D. students and 3 Post-docs. Strong teaching experience.

Organisational skills and competences

I have organized several international workshop and conferences and schools. I am Member of the Board of the Doctoral School in Neuroscience, University of Padova.
I am Member of the Organizing Committee (Comitato ordinatore) of the Master Program “Physics of Data”, Physics and Astronomy Department, University of Padova.
I am elected vice-president of CSS/ITALY, the Italian Chapter of Complex System Society
I am elected member in the CCS international council and from 2017-2020 I have been elected member of the Steering Committee of the Complex

Technical skills and competences

I co-lead the Laboratory of Interdisciplinary Physics (www.liphlab.com), where we follow several projects related to the Physics of Living systems, ranging from dynamics of ecological systems to neuroscience. My main research themes can be classified in three broad areas: 1) The formulation of simple principles to explain self-organization and emergent simplicity in nature; 2) Data analysis and complex network modeling and non-linear dynamics in socio-ecological systems; 3) Criticality in living systems, with a particular focus on brain criticality. In particular, my work focuses on the study of complex living systems under an theoretical framework provided by statistical mechanics. I address the above topics from a comprehensive framework that include data mining, theoretical modeling (both computational and analytical) and statistical analysis

Additional information

Research Grants & Third-Party Funding

UNIPD Strategic Research Departmental Grant (2021-2023 ~ 53.000 Euros) “Statistical Physics of Synthetic Biodiversity”

UNIPD - Ateneo Grant for teaching innovation (2021-2022 ~ 50.000 Euros) “Physics of Data and Digital Transformation”

FSE Grant (09/2020-12/2021 ~ 42.000 Euros) “Urban Data Mobility: Exploiting mobility data to optimize the organization of public transport services by road” in collaboration with Prof. A. Pin and L. Ballan. I am the PI for the Physics & Astronomy Dept.

UNIPD - Ateneo Grant for teaching innovation (2019-2021 ~ 60.000 Euros) “AI society and teaching innovation” PI with Prof. A. Pin and L. Ballan. I was the PI for the Physics & Astronomy Dept.

STARS Grant (03/2018 -03/2020~ 140.000 Euros). “Biodiversity, Robustness, Adaptability and Critical Transitions in living interacting systems. Investment program "Talent in Research" from the University of Padova, aimed at supporting excellent research to be conducted on its premises.

TEAMS Grant (12/2019-12/2020~30.000 €): Towards an Ecological Approach of InforMation. Fondazione Cassa di Risparmio di Padova e Rovigo.

SID Grant (11/2017-11/2018 ~ 41.000 Euros) “*Quantitative Characterization of Biodiversity in Macro-biomes: a Statistical Physics Approach*”, funded by the University of Padova as strategic departmental investments.

Senior Research Grant (12/2013 -12/2015 ~ 55.000 Euros) “Statistical Physics of Ecological Networks: from Patterns to Principles” funded by the University of Padova within the Young Scholars Project - aimed at support innovative and excellent research proposed by young scientists.

Ateneo Grant for teaching innovation (2018-2019, 40.000 Euros) “The Law of Big Data” in collaboration with Prof. A. Pin. I was the PI for the Physics & Astronomy Dept.

Publications Statistics

I'm author of 72 original peer reviewed publications, 16 as a first author, and 16 as a senior corresponding author. I've published on leading journals, including 1 in Nature, 1 in Science Advance, 3 in Nature Communications, 2 Nature Sustainability, 1 in Nature ISME Journal, 1 Nucleic Acid Research, 8 in PNAS, 1 Review of Modern Physics. I have disseminated my work through 23 internationals and 11 national invited talks, 9 International Schools and 25 contributed presentations to international conferences. My research has been mentioned in American Scientist, Nature News & Views, PNAS Commentary, European Commission DG-Environment & Unesco Global Water Forum.

total number of publications in peer-review journals: 84

total number of citations: 2810

H index: 28