



Università
per Stranieri
di Perugia



Università
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With the support and the patronage of



International Summer School on Hydrology

2nd Announcement

2023 Edition

Doctoral Summer School on Ecohydrology for Global Environmental Change

Jointly organized by

University for Foreigners of Perugia, WARREDOC
University of Palermo, Department of Engineering

VENUE & DATE

University of Palermo (Palermo, Italy) July 3rd - 7th 2023

Keynote Lecturers

Paolo D'Odorico
Amilcare Porporato
Maria Cristina Rulli
Erkan Istanbuluoglu

Scientific Committee

Leonardo Valerio Noto, Fernando Nardi, Maria Cristina Rulli

Background and Goals

The 2023 Summer School will focus on advances in the study of global environmental change bringing together research developed in hydrology, ecology, biogeochemistry, and climatology. The aim is to bring Ph.D. students, post-docs, and young scientists from different disciplines together with leading scientists in the fields of ecohydrology, environmental science and Water-Energy-Food-Ecosystem Nexus. The Summer School will include lectures on advanced topics and laboratory sessions to work on case studies, applications, or brief research projects under the lecturers' supervision.

Organizing Committee

Antonio Annis, Fabio Castelli, Giuseppe Cipolla, Roberto Deidda, Aldo Fiori, Salvatore Grimaldi, Marco Marani, Valerio Leonardo Noto, Fernando Nardi, Maria Cristina Rulli, Elena Volpi

PRACTICAL INFORMATION TO APPLY AND LOGISTICS

Venue The lessons will be held at the University of Palermo



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Department of Engineering Viale delle Scienze, 8, 90128 Palermo PA

Registration fees

School & Accommodation fee (including light lunches and accommodation in shared rooms): 550 €

School fee (including light lunches): 300 €

Call for Applications

Please send an application form by using the online form available at

<http://warredoc.unistrapg.it/en/events/2023-summer-school/> and send your CV to **warredoc@gmail.com**

Deadline for application is **May 30th, 2023**.

Once the applicant is admitted to the School, she/he will receive a confirmation email from the WARREDOC Secretariat. Once the confirmation email is received, the applicant must proceed with the payment to the local secretariat. A copy of the payment receipt must be sent to the WARREDOC Secretariat (warredoc@gmail.com) to confirm the participation.

To perform the payment (only after your application is approved) use the following bank information:

Name of Bank account holder: Urby et Orbit srl **IBAN:** IT93A0306922005100000005337

BIC/SWIFT code: BCITITMM– In the **reason for payment** indicate: 2023 Palermo Summer School

2023 Summer School Program

Each one of the three lecturers will deliver three seminars on research topics on important topics stemming from their recent research work. The students, about 25 selected PhD students, Post-Docs, young scientists, additionally to attending the seminars, will be involved in actual research work under the guidance of the lecturers. Each of the three work groups will focus on a research question, identified by the lecturer so as to be suitably self-contained, to be tackled during the School week. The research/analysis work towards answering the question will be collectively planned within each group and started as part of the School. The preliminary results from group work will be presented at the conclusion of the week and will form the basis of additional work to be performed remotely after the end of the School. The remote work, coordinated by the lecturer and by an assistant appointed at the time of the applications or during the school on the basis of qualifications and experience, will be aimed to publishing the results in a peer-reviewed international journal

Bio sketch of Keynote Lecturers



Paolo D'Odorico, University of California, Berkeley

Paolo D'Odorico is a Professor of Hydrology at the Department of Environmental Science Policy, Management at UC Berkeley. Prof. D'Odorico has a research expertise in Ecohydrology, Surface Hydrology, Ecosystem Ecology, Aeolian Processes, Desertification, Stochastic Nonlinear Environmental Dynamics and Water and Food Security, with over 200 publications in these topics. Prof. D'Odorico is currently investigating the globalization of water through virtual water trade and international land investments, and its impact on water equity, societal resilience, environmental stewardship, and food security. Prof. D'Odorico has been awarded for his work with the 2016 Paul Witherspoon Lecture award, the 2013 Maury-Tice Environmental Prize and the 2009 Sustainability Science Award from the Ecological Society of America. Prof. D'Odorico is currently a Fellow of the American Geophysical Union and The John Simon Guggenheim Memorial Foundation..



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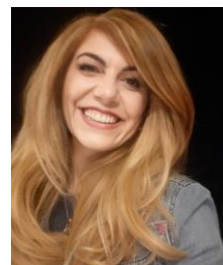
Amilcare Porporato, *Princeton University*

Amilcare Porporato is the Thomas J. Wu '94 Professor of Civil and Environmental Engineering and Princeton Environmental Institute at Princeton University. Dr. Porporato's research focuses on the quantitative description and prediction of the complex dynamics of the terrestrial water cycle, with special interest in the impact of the hydrologic cycle on temporal and spatial variability of ecosystem processes (eco-hydrology) and the related energy, carbon and nutrient cycles. He uses both theoretical and experimental approaches to isolate and describe the dominant dynamical components of these physical and biological interactions. Specific research areas focus on soil moisture-microbes-plant dynamics, mathematical modeling of biogeochemical cycles, soil-atmosphere dynamics, and sustainable use of soil and water resources (irrigation, soil salinization and remediation) with particular attention to semiarid ecosystems, both natural and agricultural. Because of the inherent interdisciplinarity of such problems, his research methods draw from fluid mechanics, soil physics, plant physiology, statistical physics, nonlinear dynamics, non-equilibrium thermodynamics, and complex system science.



Maria Cristina Rulli, *Politecnico di Milano*

Maria Cristina Rulli is Professor of Hydrology and Water and Food Security at the Politecnico di Milano. Her research focus on the interaction between hydrological processes and humanity. Using the Food-Energy-Water (FEW) nexus perspective, she has been investigating the impacts on food and water security induced by global changes. She has focused on the emergent phenomenon of Large Scale Land Acquisition (LSLA) and its implication on water, energy and food security, as well as on water governance, rural livelihoods, and the emergence of water conflicts. Her most recent research concentrates on the nexus between Health and Environment focusing on the potential nexus between the unsustainable food system and the insurgence of diseases (e.g., zoonotic; food related: uncommunicable).



Erkan Istanbuluoglu, *University of Washington*

Erkan Istanbuluoglu received his PhD in Civil and Environmental Engineering (CEE) at Utah State University in 2003, and his BS and MS degrees in Agricultural Engineering at Uludag University, Turkey, in 1996 and 1999 respectively. He completed a postdoc at MIT in CEE in 2005. Erkan served on the faculty of University of Nebraska, Lincoln (2005-2009) before joining the University of Washington in the fall of 2009 as an Assistant Professor. Erkan is promoted to Associate Professor in 2013. Erkan's research is highly interdisciplinary and aims to improve the understanding and modeling of interactions among hydrologic, ecologic, and geomorphic processes in watersheds; their connections to society; and the impact of climate change on watershed response.