

PERSONAL INFORMATION Luigi Conte

POSITION PhD student in Environmental Science, Ca' Foscari University, Venice

WORK EXPERIENCE

from 2022 **PhD student in Environmental Science**
Department of Environmental Sciences, Informatics and Statistics, Ca' Foscari University, Venice, Italy

- Complex systems modelling and analysis
- Agroecology
- Community Science

Business or sector Scientific research

2023 - 2024 **Scientific tutor**
Department of Molecular Science and Nanosystems, Ca' Foscari University, Venice, Italy

- Physics I tutor for bachelor student in Engineering Physics

Business or sector Education

2021 - 2022 **IPCC research assistant**
IPCC AR6 Feasibility team

- Co-coordinator of AR6 Feasibility team

Business or sector Science and Policy

2021 - 2022 **Science educator**
Association The Science Zone, Rome, Italy
<https://thesciencezoneblog.wordpress.com/info/>

- Scientific tutor in popular science projects in middle and high schools
- Project manager, Women Science for Environmental Justice

Business or sector Education

2021 **Erasmus secretariat intern**
Faculty of Mathematical, Physical and Biological Sciences, Sapienza University, Rome, Italy

- Direct support to Erasmus students
- Co-coordination of Erasmus activities and organisation

Business or sector Administration

2020 **Scientific tutor**
Department of Biology, Sapienza University, Roma, Italy

- General Physics tutor for bachelor student in Environmental Science
- Calculus tutor for bachelor student in Environmental Science

Business or sector Education

2019 Research intern in Climate Modelling

ENEA, Casaccia, Italy

- Climate data analysis
- Seasonal forecasts of bioclimatic indices in agriculture

Business or sector Scientific research

2019 Scientific guide

Chemistry museum "Primo Levi", Sapienza University, Roma, Italy

- Scientific tutor and visitors guide

Business or sector Education

2018 Research Intern in Forest Ecology

University of Tuscia, Viterbo, Italy

- Micrometeorological data analysis and modelling in Mediterranean areas
- Land surface climate, vegetation and crop modelling

Business or sector Scientific research

2017-2018 Research Intern in Earth System Physics

Max Planck Institute for Biogeochemistry, Jena, Germany

- Land surface climate, vegetation and crop modelling
- Micrometeorological data analysis in Tropical areas

Business or sector Scientific research

EDUCATION AND TRAINING

2023 LIPHE4 Summer School

ICTA-UAB, Bellaterra, Spain

- Energy Transitions
- Environmental Accounting

2022 Sentieri in Transizione Summer School

Bauladu, Italy

- Facilitation
- Environmental Justice
- Energy Transitions

2018-2021 Master Degree in Physics

Department of Physics, Sapienza University, Rome, Italy

- Biosystem Physics
- Systems Biology

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2021 RomaUp Training

Rome, Italy

- Citizen science
- Participatory environmental monitoring

2020 Boosting Green Science Education at School Training

Rome, Italy

- Hands-on science education
- Popularising science

2020 MED-GOLD Living Lab

ENEA, Casaccia, Italy

- Bio-climatic data analysis for agriculture

2018 Thermodynamics of Earth System processes course

IMPRS-gBGC, Jena, Germany

- Thermodynamics of radiation
- Thermodynamics of the water cycle
- Thermodynamics of biogeochemical cycles

2015-2016 Erasmus experience

Johannes Gutenberg University, Mainz, Germany

2013-2016 Bachelor Degree in Physics

University of Trento, Trento, Italy

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PERSONAL SKILLS

Mother tongue(s) Italian

Other language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	B2	B2	B2	B2	B2
German	B1	B1	B1	B1	B1
Spanish	A2	A2	A2	A2	A2
Portuguese	A1	A1	A1	A1	A1

Levels: A1/2: Basic user - B1/2: Independent user - C1/2 Proficient user
Common European Framework of Reference for Languages

Communication skills ▪ good communication skills gained through my experience in popularising science, education and research

Organisational / managerial skills ▪ group coordination (working in educational and community science projects)
▪ group facilitation (working in scientific and civil society groups)

Computer skills ▪ advanced programming skills (Python, R, C++)

ADDITIONAL INFORMATION

Publications

Conte, L., Gonella, F., Giansanti, A., Kleidon, A., & Romano, A. (2023). Modeling cell populations metabolism and competition under maximum power constraints. *PLOS Computational Biology*, 19(11), e1011607.

Conte, L. (2023). Per una scienza partecipata e decoloniale. *Gli Asini*, 111, Nuova serie/2023.

Conte, L. (2023) Processi e metodi di co-creazione della conoscenza agroecologica in reti contadine siciliane. In Book of Abstracts: *Convegno Nazionale Citizen Science Italia*

Conte, L., Rubino, G., Lo Cascio M. (2023). Un disastro annunciato. *Jacobin Italia*.

Conte, L., Montalbano, V., Caja, E., Lo Cascio, M. (2023) Cambiamento climatico e sistemi alimentari a confronto tra prospettiva agroindustriale e agroecologica in Sicilia: un approccio partecipato di ricerca-intervento. In Book of Abstracts: *Geografia e Ecologia Politica: teorie, pratiche, discorsi - IV Edizione delle Giornate di studi interdisciplinari "Geografia e..."*

Conte, L., Prakofjewa, J., Florida, T., Stocco, A., Comar, V., Gonella, F., & Lo Cascio, M. (2024). Learning from farmers on potentials and limits for an agroecological transition: a participatory action research in Western Sicily. *Frontiers in Environmental Science*, 12, 1347915.

Romano A, **Conte L**, Giansanti A, Kleidon A, Gonella F. PB2084: MODELING DYNAMIC EVOLUTION OF MULTIPLE MYELOMA STUDYING CELL POPULATIONS METABOLISM AND COMPETITION UNDER MAXIMUM POWER CONSTRAINTS: A SYSTEMS-THINKING BASED APPROACH. *Hemasphere*. 2023 Aug 8;7(Suppl):e331389c. doi: 10.1097/01.HS9.0000975132.33138.9c. PMID: PMC10428691.

Conte, L., Cristiano, S., Gonella, F. (2023) Different land use change scenarios: from deforestation to agroecology. In Book of Abstracts: *11th Biennial Emery Research Conference*

Forghieri, G., **Conte, L.**, Cristiano, S., Gonella, F. (2023) A systems thinking emery-based perspective of soil interactions for plant nutrient uptake optimization by crops. In Book of Abstracts: *11th Biennial Emery Research Conference*

Ley, D., Adams, H., Araos, M., Basu, R., Bazaz, A., **Conte, L.**, ... & Sugiyama, M. (2022) Cross-Chapter Box FEASIB | Feasibility Assessment of Adaptation Options: An Update of the SR1.5 In book: *Climate Change 2022: Impacts, Adaptation, and Vulnerability. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change*, Publisher: *Cambridge University Press*

Conte, L., Renner, M., Brando, P., Oliveira dos Santos, C., Silvério, D., Kolle, O., ... & Kleidon, A. (2019). Effects of tropical deforestation on surface energy balance partitioning in Southeastern Amazonia estimated from maximum convective power. *Geophysical Research Letters*, 46(8), 4396-4403.

Renner, M., Brenner, C., Mallick, K., Wizemann, H. D., **Conte, L.**, Trebs, I., ... & Kleidon, A. (2019). Using phase lags to evaluate model biases in simulating the diurnal cycle of evapotranspiration: a case study in Luxembourg. *Hydrology and Earth System Sciences*, 23(1), 515-535.

Presentations

2023 - Quanto tempo rimane? Round table talk, *La Biennale La Science de l'Art*, Villa Galileo, University of Florence, Florence

2023 - Processi e metodi di co-creazione della conoscenza agroecologica in reti contadine siciliane. Conference talk, *Convegno Nazionale Citizen Science Italia*, Pisa, Italy

2023 - Which are the barriers to achieve an emancipatory agroecological transition in western Sicily? Conference talk, *IX Encuentro Internacional La Economía de los/las Trabajadores/as*, Rosario, Argentina

2023 - Cambiamento climatico e sistemi alimentari a confronto tra prospettiva agroindustriale e agroecologica in Sicilia: un approccio partecipato di ricerca-intervento. Conference talk, *Geografia e Ecologia Politica: teorie, pratiche, discorsi - IV Edizione delle Giornate di studi interdisciplinari "Geografia e..."*, Milano, Italy

2023 - Different land use change scenarios: from deforestation to agroecology. Conference talk, *11th Biennial Emery Research Conference*, University of Florida, Gainesville, Florida, USA

2022 - Women Scientists for Environmental Justice. Conference talk, *"She Science - La Scienza al Femminile"*, Villa Galileo, University of Florence, Florence

2022 - Alternative! Voci dal basso: via d'uscita ecologiche alle logiche del mercato. Round table talk, *Global Strike for Climate at Sapienza University*, Rome, Italy

2018 - Understanding the effects of land cover change in southeastern Amazonia with a thermodynamically-constrained surface energy balance approach. Conference talk, *Landscape Conference*, Berlin, Germany

2018 - Understanding the effects of land cover change in southeastern Amazonia with a thermodynamically-constrained surface energy balance approach. Conference poster presentation, *EGU General Assembly*, Vienna, Austria

2017 - Effects of land cover change on the surface energy balance in southeastern Amazonia inferred from the maximum power principle. Conference poster presentation, *Thermodynamics and Optimality in the Earth System*, Jena, Germany

Conferences

Convegno Nazionale Citizen Science Italia, Pisa, 2023

Geografia e Ecologia Politica: teorie, pratiche, discorsi - IV Edizione delle Giornate di studi interdisciplinari "Geografia e...", Milano, Italy, 2023

11th Biennial Emergy Research Conference, University of Florida, Gainesville, Florida, USA, 2023

IX Encuentro Internacional La Economía de los/las Trabajadores/as, Rosario, Argentina, 2023

Convegno Nazionale Citizen Science Italia, Grosseto, 2021

Landscape Conference, Berlin, 2018

EGU General Assembly, Vienna, 2018

Thermodynamics and Optimality in the Earth System, Jena, 2017

Projects

Scienza Radicata, <https://scienzaradicata.github.io/>

Women Scientists for Environmental Justice, <https://www.inventati.org/debris/ws4ej/index.html>

Seminars

2023 - Ecosystem and human food systems development: principles and methodologies to investigate life support systems with application in sustainability science. Department of Biological and Environmental Science, Federal University of Great Dourados, Dourados, Mato Grosso do Sul, Brazil

2023 and 2022 - Living Systems from the Earth to the Cell: principles, models, applications. Department of Physics, Sapienza University, Rome, Italy

2021 - Pianeta Terra ultima chiamata? Capire, raccontare e affrontare la crisi climatica ed ecologica. Logos Festa della Parola, Rome, Italy

2020 - La fisica del sistema Terra e dei cambiamenti climatici. Global digital Strike for Climate, Sapienza University, Rome, Italy, 2020

Honours and awards

Premio di merito dell'Università degli Studi di Trento (4.500 E.)

Memberships

Emergy Society

Agroecology Europe