

PERSONAL INFORMATION

Name Stefano Lanzoni

Address DEPARTMENT OF CIVIL, ENVIRONMENTAL, AND ARCHITECTURAL ENGINEERING,

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SCOPUS links
Other link
https://www.scopus.com/authid/detail.uri?authorld=6603854181
https://publons.com/researcher/2276121/stefano-lanzoni/

https://scholar.google.com/citations?user=hxOEWkUAAAAJ

E-mail stefano.lanzoni@unipd.it

Nationality Italian

Date of Birth 14/10/1962

Gender Male

WORK EXPERIENCE

• Dates (from - to) 2011 - today

Name and address of the employer
 Department of Civil, Environmental, and Architectural Engineering, University of Padua (Italy)

• Type of business or sector

• Occupation or position held Full professor – Fluid Mechanics

· Main activities and responsibilities

• Dates (from - to) 2002 – 2011

• Name and address of the employer Department of Hydraulic, Maritime, Environmental and Geotechnical Engineering, University of

Padua (Italy)

• Type of business or sector

Occupation or position held
 Associate professor - Hydrodynamics

· Main activities and responsibilities

• Dates (from - to) 1994 – 2002

Name and address of the employer Department of Hydraulic, Maritime, Environmental and Geotechnical Engineering, University of

Padua (Italy)

Type of business or sector
 Occupation or position held
 Assistant professor – Hydrodynamics

Occupation or position held
 Main activities and responsibilities

ivities and responsibilities

• Dates (from - to) 1995

• Dates (from - to) 1995

Name and address of the employer
 Delft Hydraulics Laboratory – De Voorst (NL)

• Type of business or sector

Occupation or position held
 Visiting researcher

Main activities and responsibilities

EDUCATION AND TRAINING

• Dates (from - to) 1990-1993

Name and type of organisation
 University of Padua (Italy)

providing education and training

Pagina 1 - Curriculum vitae September, 12 2023

- Principal subjects/occupational skills covered
 - Title of qualification awarded

Ph.D in Hydrodynamics

PhD student

• Dates (from - to)

 Name and type of organisation providing education and training

Principal subjects/occupational skills covered

Title of qualification awarded

1982 - 1988

Hydraulic Engineering

M.Sc., Magna cum laude

Università of Padua (Italy)

PERSONAL SKILLS AND COMPETENCES

MOTHER TONGUE
OTHER LANGUAGES

ITALIAN

ENGLISH (FLUENT WRITTEN AND SPOKEN)

SCIENTIFIC SKILLS AND COMPETENCES

Living and working with other people, in multicultural environments, in positions where communication is important and situations where teamwork is essential (for example culture and sports), etc.

- Research interests (5 Key words): fluvial morphodynamics, tidal morphodynamics, hydrodynamics, biofluiddynamics;
- Among the top 1% most influential scientists in the field of Civil and Environmental Engineering out of more than 580,000 scientists globally (loannidis et al., 2020; https://doi.org/10.1371/journal.pbio.3000918), and among the top 2% overall;
- Member of the Concordi Academy of Rovigo;
- > 15 invited seminars, > 100 communications at conferences & workshops, among which (selected):
 - Accademia Nazionale dei Lincei, Keynote Lecture "Lagoon ecomorphodynamics and the future of coastal wetlands", March 22, 2021;
 - Gilbert Club, 33rd Annual Meeting, UC Berkeley (USA). Keynote speech:
 "Tidal and fluvial meanders: two partially overlapping worlds?", December 17, 2016;
 - 3rd, IAHR Europe Congress, 2014, Porto (Portugal). Keynote Lecture: "Models of meandering rivers", April 15, 2014;
 - 5th Symposium on River, Coastal and Estuarine Morphodynamics RCEM, Keynote Lecture: "Free morphodynamic behaviour, current issues on meandering", Enschede, The Netherlands, September 2007;
 - 38th Binghamton Geomorphology Symposium, Keynote Lecture: "Dynamics of echo-geomorphic patterns in tidal environments", Duke University, Durham, North Carolina, USA, October 2007.
- Supervisor or co-supervisor of 18 PhD students, 7 Post-docs.
- Supervisor of 50 MS students
- Teaching attivity
 - MS courses: River Hydraulics form the Hillslope to the Estuary (Water and Geological Risk Engineering), 2021-present; Advanced Fluid Mechanics (Mathematical Engineering, 2016-present); Environmental Fluid Mechanics (Environmental Engineering, 2011-2015); Fluvial Hydraulics (Civil Engineering, 2012- 2015); Pollutant dynamics (Environmental Engineering, 2000-2011); Fluid Mechanics 2 (Aerospatial Engineering, 2003- 2010); Hydraulic Measurements (Civil Engineering, 2000-2003); Hydraulic Infrastructures (Building Engineering, 1998-1999).
 - BS courses: Hydraulics (Environmental Engineering, 2016-2021); Fluid Mechanics 1 (Aerospatial Engineering, 2003-2015).
 - PhD courses: Idrodynamic Stability; Turbulence.

- Reviewer activity:

- Journals: Science, Nature Geoscience, Proceedings of the National Academy of U.S. Sciences. Journal of Fluid Mechanics; Proceedings of Royal Society, Water Resources Research; Journal of Geophysical Research; Journal of Hydraulic Engineering; Journal of Hydraulic Research; Earth Surface Processes and Landforms; Advances in Water Resources, Catena;
- o Institutions: ANVUR, PRIN ex 40%, FIRB, CIVR, National Science Foundation (USA), Technology Foundation STW (NL), Austrian Science

Fund (A), European Research Council (EU), Agencie Nationale de la Rechearche (FR).

RELEVANT ROLES AND COMPETENCES

Coordination and administration of people, projects and budgets; at work, in voluntary work (for example culture and sports) and at home, etc.

- Director, Mathematical Engineering Master Program, University of Padua (2016-present).
- Director, PhD School of *Civil and Environmental Engineering Sciences*, University of *Padua*, 2008-2017;
- President (elected), Italian Hydraulic Group (2016-2021).
- Director, Hydraulic Laboratory of the Department of Hydraulic, Coastal, Environmental and Geothecnical Engineering, University of Padua (1998-2007);
- Coordinator, LOC 10th Symposium on River, Coastal and Estuarine Morphodynamics -RCEM, Padua, Italy, 2017;
- Coordinator, as PI or Co-PI, of the following research projects:
 - Coordinator, PRIN AADEMO, "Allogenic and Autogenic controls of DElta MOrphodynamics", 221 k€, MIUR, 2023-2025;
 - Coordinator, project "Updating the Po River Management Plan and Integration with the Branches of the Delta", 119 k€, District Basin Authority of the Po River, 2022-2025;
 - Coordinator, GAPDEMM, "GIS-based integrated platform for Debris Flow Monitoring, Modeling and Hazard Mitigation", 150 k€, Cariparo Foundation, 2012-2015;
 - Coordinator, PRIN "Eco-Morphodynamics of tidal environments and climate change", 150 k€, MIUR, 2008-2011.
 - o Co-Coordinator, project "Updating the morphological plan of the Venice lagoon", 400 k€, Venice Water Management Authority, 2008-2010;
 - o Coordinator, MoDiTe, "Generation, propagation and transport models for the territory safeguarding", 320 k€, Cariverona Foundation, 2006-2008;
 - Local Coordinator, COFIN ex 40% "Morphodynamic of alluvial rivers",44 k€, MIUR 2001-2004.
 - o Coordinator, "Morphodynamics of tidal environments under the action of natural forcing and climate change", 50 k€, University of Padua, 2010-2012;
 - o Coordinator, "Analysis of the morphodynamic behaviour of meandering rivers", 20 k€,, University of Padua, 2004-2006

PUBLICATION INDEXES (Scopus)

- NUMBER OF PUBLICATIONS: 102
- TOTAL NUMBER OF CITATIONS: 4870
- H-INDEX: 42

10 MOST RELEVANT PUBLICATIONS In the last 10 years.

- Zhao, K., Coco, G., Gong, Z., Darby, S. E., LANZONI, S., Xu, F., Townend, I. (2022).
 A Review on Bank Retreat: Mechanisms, Observations, and Modeling. Reviews of Geophysics, 60(2), 1–51. doi.org/10.1029/2021rg000761
- Sgarabotto, A., D'Alpaos, A., & Lanzoni, S. (2021). Effects of Vegetation, Sediment Supply and Sea Level Rise on the Morphodynamic Evolution of Tidal Channels. Water Resources Research, 57(7). doi:10.1029/2020wr028577
- Geng, L., D'Alpaos, A., Sgarabotto, A., Gong, Z., & Lanzoni, S. (2021). Intertwined eco⊪morphodynamic evolution of salt marshes and emerging tidal channel networks. Water Resources Research, 1–25. doi:10.1029/2021wr030840
- Francalanci, S., Lanzoni, S., Solari, L., & Papanicolaou, A. N. (2020). Equilibrium cross section of river channels with cohesive erodible banks. Journal of Geophysical Research: Earth Surface, (125), 1–20. doi:10.1029/2019JF005286
- Lopez Dubon, S., Lanzoni, S. (2019). Meandering evolution and width variations: A physics-statistics-based modeling approach, Water Resources Research, 55(1), 76-94. doi:10.1029/2018WR023639
- Gregoretti, C., Stancanelli, L.M., Bernard, M., Boreggio, M., Degetto, M., Lanzoni, S. (2019). Relevance of erosion processes when modelling in-channel gravel debris flows for efficient hazard assessment, Journal of Hydrology, 568, 575-591. doi:10.1016/j.jhydrol.2018.10.001
- 7. Bogoni, M., M. Putti, & **Lanzoni**, **S.** (2017), Modeling meander morphodynamics over self-formed heterogeneous floodplains, Water Resources Research, 53, 5137–5157, doi:10.1002/2017WR020726
- 8. **Lanzoni**, **S.**, C. Gregoretti, & L. M. Stancanelli (2017), Coarse-grained debris flow dynamics on erodible beds, Journal of Geophysical Research: Earth Surface, 122,592–614, doi: 10.1002/2016JF004046
- 9. **Lanzoni**, **S.**, D'Alpaos, A. (2015), On funneling of tidal channels, Journal of Geophysical Research: Earth Surface, 120(3), 433-452, doi:10.1002/2014JF003203
- 10. **Lanzoni**, **S.**, Luchi, R., Bolla Pittaluga, M. (2015), Modeling the morphodynamic equilibrium of an intermediate reach of the Po River (Italy), Advances in Water Res., 81, 95-102, doi:10.1016/j.advwatres.2014.11.004

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