

**Name:**

Costantino Manes

**Date and place of birth:**

14/06/1977, Senigallia (AN), Italy.

**Nationality:**

Italian

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**Academic career**

*Since Nov 2015:* Associate Professor at DIATI -Dipartimento di Ingegneria dell'Ambiente, del Territorio e delle Infrastrutture, Politecnico di Torino, Torino, Italy.

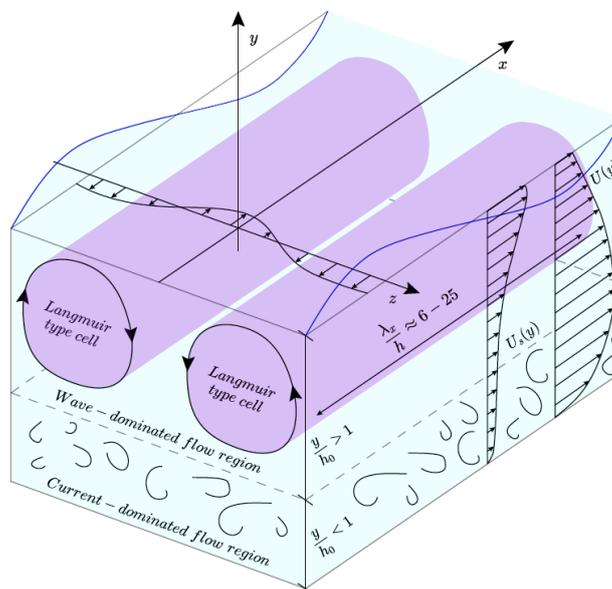
*Oct 2011-Nov 2015:* Lecturer at the Faculty of Engineering and the Environment, University of Southampton, Southampton, UK,

*Oct 2008-Oct 2011:* Research Assistant at the Department of Hydraulics, Transports and Civil Infrastructures, Politecnico di Torino, Torino, Italy.

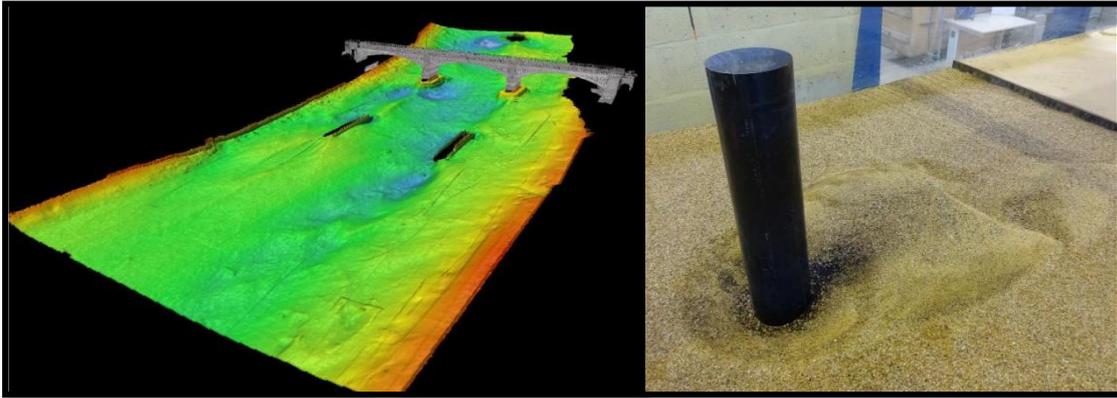
*Oct 2006-Oct 2008:* Post doc at the Federal Institute for Snow and Avalanche Research WSL/SLF, Flüelastr. Davos Switzerland.

*Oct 2002-June 2006:* PhD in Engineering at the Department of Engineering, University of Aberdeen, Aberdeen, Scotland, UK.

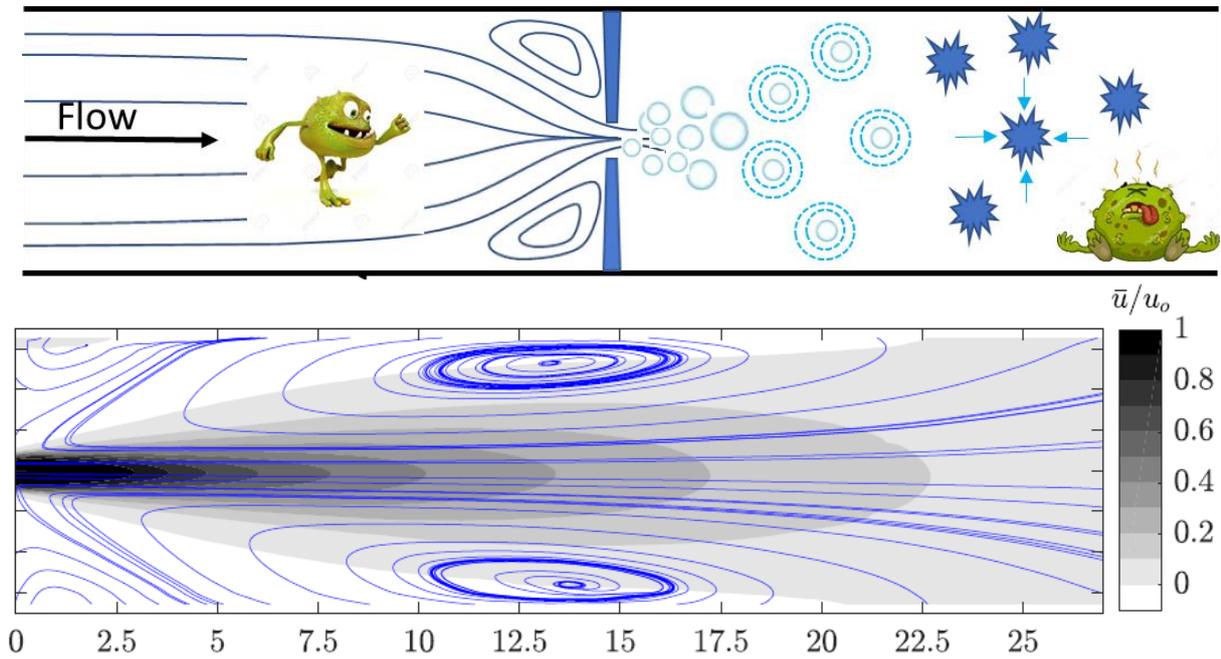
*March 2002:* Laurea (5 years programme) in Environmental Engineering, University of Ancona, Italy.

**Research interests****Wall-turbulence and wave-turbulence interaction**

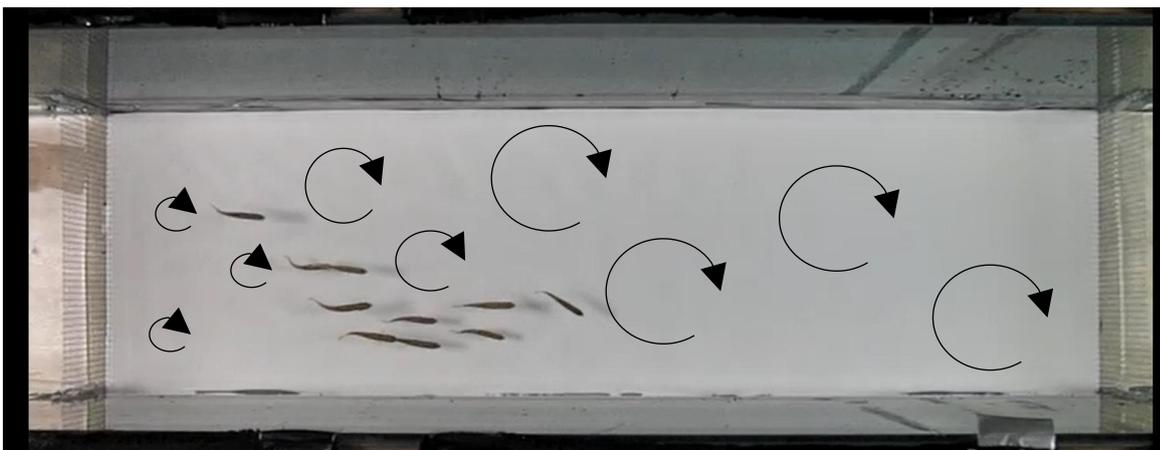
**Bridge scour: modelling and monitoring**



**Hydrodynamic cavitation: disinfection efficiency, turbulence behaviour in bubbly flows**



**Ecohydraulics: fish turbulence interaction, collective behaviour**



## Awards and grants

- Sep 2002 Member of the Italian Association (“Albo”) of Civil Engineers.
- 2002-2005 EPSRC postgraduate scholarship.
- Jan 2010 Visiting Scientist at the University of Aberdeen, Scotland, UK. In collaboration with Dr. D. Pokrajac, (£ 2,990, Royal Society, travel grant, co-applicant).
- Feb 2013 Network Rail (£ 24,000, Research Project Leader). The funding comes from a research framework agreement between the University of Southampton and Network rail, PI: Prof William Powrie. In collaboration with Dr. S Clublely and Prof. D. Richards.
- Nov 2013 Network Rail (budget holder and Research leader, £250,000). The funding comes from a research framework agreement between the University of Southampton and Network rail, PI: Prof William Powrie). In collaboration with Dr. S Clublely and Prof. D. Richards.
- July 2014 Visiting scientist at the Università Politecnica delle Marche. In collaboration with Prof. M. Brocchini (Campus World, € 2,000).
- Mar 2015 Fellow of the Higher Education Academy (UK).
- Nov 2015 Visiting fellow at the Faculty of Engineering and the Environment, University of Southampton, UK (3 years appointment).
- June 2016 Bill Curtin Medal for best paper in Civil Engineering 2015, awarded by the Institute of Civil Engineering, ICE publishing, UK.
- Aug 2016 Principal investigator in the Project “Attrarre docenti di alta qualità tramite Starting Grant”(€ 93,500, San Paolo Foundation).
- July 2017 Principal investigator in the Project “Metti in rete la tua ricerca” (€150,000, Principal Investigator, San Paolo Foundation).
- April 2019 Principal investigator in a research contract in collaboration with TREELIUM about hydrodynamic cavitation (€ 25,000).
- Sept 2019 Principal investigator in a research contract in collaboration with FILTERS about the design and optimization of coalescing filters for oil mists (€ 100,000).
- Jan 2020 Co-investigator in the ITN MSCA project “RIBES” (budget PoliTO: € 700,000)

## Teaching experience

- Currently: Coordinator of the Courses “Fluid Mechanics” and “Environmental Fluid Mechanics” as well as lecturer for the course “Hydraulics II” at Politecnico di Torino.
- 2011-2015 Lecturer and module coordinator for the following courses at the University of Southampton:
- Hydraulics (year 2, Beng/Meng in Civil and Environmental Engineering)
  - Applied Hydraulics (year 3, Beng/Meng in Civil and Environmental Engineering)
  - Hydraulic Engineering and Sediment Transport (year 4, Meng in Civil and Environmental Engineering)
- 2010-2011 Lecturer for the course of Fluid Mechanics at Politecnico di Torino (degree in Automotive Engineering, 2<sup>nd</sup> year, in English).

Extensive experience in supervising undergraduate and master students for their final year project, in Italy, UK and Switzerland. Currently supervising 2 PhD students and 3 post-docs.

### **PhDs lead to completion**

Dr. Jim Kerr	University of Southampton, UK.
Dr. Sonia Taddei	University of Southampton, UK.
Dr. Ali Mosayyebi	University of Southampton, UK.
Dr. Ashley Rogers	University of Southampton, UK.
Dr. Jasper De Bie	University of Southampton, UK.
Dr. Francesco Coscarella	Università della Calabria, Italy.
Dr. Domenico Ferraro	Università della Calabria, Italy.
Dr. Cosimo Peruzzi	Politecnico di Torino, Italy.

### **Referee for**

- Journal of Fluid Mechanics, Cambridge University Press, UK.
- Physics of Fluids, American Institute of Physics, US.
- Geophysical Research Letters, AGU, US.
- Acta Geophysica, Springer, Germany.
- Transport in Porous Media, Springer, Germany.
- Water Resources Research, AGU, US.
- Journal of Geophysical Research-Earth, AGU, US.
- Advances in Water Resources, Elsevier, Netherlands.
- Journal of Geophysical Research-Atmosphere, AGU, US.
- Journal of Hydrologic Engineering, ASCE, US.
- Journal of Hydraulic Engineering, ASCE, US.
- Journal of Hydraulic Research, IAHR.
- Experimental Thermal and Fluid Science, Elsevier, Netherlands.
- Engineering applications of Computational Fluid Mechanics.
- International Journal of Sediment Research, Elsevier, Netherlands.

### **External Responsibilities**

- Associate Editor, Advances in Water Resources, Elsevier, Netherlands.
- PhD committee: EPFL (Switzerland).
- PhD committee: University of Melbourne (Australia).

### **Administrative roles**

- Former member of the Faculty Ethics Committee, University of Southampton
- Former admission tutor, University of Southampton (responsible for the admission of undergraduate students in the Civil and Environmental Engineering programme).
- Communication and Public engagement

### **Invited talks and seminars**

- June 2011 *IUGG Meeting*, Melbourne, Australia, invited talk.
- Dec 2013 *AGU fall meeting*, San Francisco, honorary poster presentation.
- Sept 2014 *River Flow*, Lausanne, Switzerland, Chairman and oral presentation.
- Aug 2017 Summer School, *Transport Phenomena and the Limits of Life in the Biosphere*, KIT/IMK-IFU, Garmisch-Partenkirchen (Germany). Invited Lecturer.

### **Languages**

Fluent in English, Italian (mother tongue) and Portuguese.

### **Patents**

- 1) UK priority patent | Application GB1714337.1 | Filed 6th September 2017 | Patent Title: **Stent with streamlined side holes** | University of Southampton (inventors: **C. Manes**, D. Carugo, A. Mosayyebi).
- 2) New International (PCT) Patent | Application No. PCT/GB2018/052522 | Claiming priority from UK application no. 1714337.1 | Filed 6th September 2018 | Patent Title: **Stent with streamlined side holes** | University of Southampton (inventors: **C. Manes**, D. Carugo, A. Mosayyebi).

## **Publications**

<https://scholar.google.it/citations?user=7MoVaQ0AAAAJ&hl=it&oi=ao>