



**The DFG Research Training Group on Urban Water Interfaces (UWI) invites
to guest lectures by**

**Prof. Michele La Rocca (Università degli Studi Roma Tre,
Italy)**

**Wednesday, 30th March 2016, 11 am and 2 pm, TU Berlin, Chair of Water
Resources Management and Modeling of Hydrosystems, Room 566**

Lecture title:

Salt-freshwater interfaces in estuarine zones. Models and results.

Part I – Models (11 am)

- Introduction - Classification of estuaries
- The Boussinesq approximation for weakly stratified estuaries
- A simplified model for estuarine circulation
- The Shallow water theory for strongly stratified estuaries
- Dispersion of contaminants in well mixed shallow estuaries

Part II Results (2 pm)

- Gravity currents in a realistic environment
- Fully 3D numerical simulation of gravity currents
- 1D numerical Simulation of dispersion of contaminants in well mixed shallow estuaries

About the Speaker

Michele La Rocca got the Master's degree in Mechanical Engineering at the Sapienza University of Rome and the PhD in Theoretical and Applied Mechanics at the University Federico II of Naples. He became Researcher and then Professor of Hydrodynamics and Fluid Mechanics at the University Roma Tre. His research interests are focused on the development of innovative computational methods for Environmental Fluid Mechanics, mainly based on the Boltzmann kinetic equation. He wrote many papers, appeared on international journal and on proceedings of international congresses. He is invited lecturer at the Technical Universities of Berlin and Barcelona.

Further information about Prof. Michele La Rocca can be found at:

<http://www.uniroma3.it/persona.php?persona=zDFqxd2m2gKCkrICCeOG0kIXNxVvwNdJPWAx5tdG%2Fuk%3D&tab=1>

How to find TU Berlin, Chair of Water Resources Management and Modeling of Hydrosystems:

http://www.wahyd.tu-berlin.de/menue/about_us/location/parameter/en/