

NOON TALK @ DIATI

Please bring your own mug. Coffee and tea will be provided

Mercoledi 7 novembre 2018 ore 13.00

Politecnico di Torino Sala Riunioni, primo piano, DIATI ingresso 3

Roberto Revelli

professore associato. DIATI

"ECO.G.U.S. - ECOsystem services for resilient and sustainable cities: an ecohydrological approach for Green Urban Spaces"

Prof. Pierluigi Claps moderates the discussion



POLITECNICO DI TORINO

Dipartimento di Ingegneria dell'Ambiente, del Territorio e delle Infrastrutture



ABSTRACT

For the first time in recorded history the majority of people live in cities and the increasing urbanization modifies the mass, momentum, and energy budgets of cities. In this way, it is imperative to develop quantitative approaches to sustainability: this means quantifying fluxes and their impacts on processes and understanding the coupled dynamics of water, energy and nutrients in and out urban ecosystems. In the next decades redevelopment, densification, population increase and demographic shift, as well as the climate change, will potentially impact the production and consumption of urban ecosystem services. Among the various ecosystem services, the ECO.G.U.S. project focuses on urban green spaces as fundamental components of urban water, energy, and nutrient cycles and key resources for building sustainable, resilient and adaptive urban systems. Under the framework of "socio-ecohydrology" the main goal of ECO.G.U.S. project is to develop scientific tools to quantify the urban green spaces sustainability and their benefits as ecosystem services.

BIOGRAPHY

Roberto Revelli (Ph.D. in Hydraulics in 1997) is professor in Hydraulics at the Politecnico di Torino in DIATI. He has been Vice-Director of DIATI from 2012 to 2015 and coordinator of the Master in Civil Engineering for Water Management. In 2016 he wins a Marie Curie Fellowship with the project "ECO.G.U.S." and he becomes visiting associate professor in the Pratt School of Engineering at Duke University in North Carolina (US). His teaching activity has been mainly addressed to Civil and Environmental MSc students (Hydraulics, Environmental and Fluvial Hydraulics) and Architecture students (Water engineering for historical gardens, Landscape water systems). He was also a collaborator of HydroAid - Management of Water Resources Institutes - in particular in the field of Integrated Urban Water Management.

His research interests are related to the application of numerical methods for the solution of hydraulics problems, the study of flow in the hyporheic zone, the micro hydropower generation systems and the history of hydraulics. He is also interested in the connections between hydraulics and preservation of the cultural heritage.

Save the date for our next speaker-event, on December 5 2018, at 13:00.