# OON TALK® DIAT

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### Mercoledì 8 NOVEMBRE 2017 ore 13.30

Politecnico di Torino Sala Riunioni Primo Piano, DIATI ingresso 3

### Paolo Dabove RTD-a at DIATI

**ABSTRACT** 

## "Frontiers in positioning techniques"

Prof. Ambrogio Manzino moderates the discussion

Paolo Dabove is an Assistant Professor (since December 2016) in Environmental Engineering at Politecnico di Torino. He graduated with a Master Degree in Environmental Engineering - "Natural and industrial risk management" from the University of Genoa in 2009. He received his Ph.D. in Environmental and Territory from the Politecnico di Torino in 2013 with a thesis entitled "Quality control of the kinematic positioning into GNSS networks".

His principal research interests are in quality control of GNSS positioning, kinematic positioning with low-cost GNSS instruments, monitoring techniques with Geomatics instruments, low cost INS and GNSS systems for mobile mapping, indoor positioning for navigation purposes. He is also author of more than 50 publications in international and Italian journals and proceedings; moreover, he has also co-authored five chapters in international books. Main topics of these publications are: GNSS permanent networks for real-time and post-processing positioning and navigation services, deformations control and modelling, digital terrain modelling quality assessment, physical geodesy, GNSS and INS integration, indoor positioning.

He has won the 2015 Young Authors Award promoted by Italian Society of Photogrammetry and Topography (SIFET).

Save the date for our next speaker-event, on December 6, at 13.00



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### **BIOGRAPHY**

Nowadays, thanks to new technologies, the information about our position is available in almost every moment and almost everywhere thanks to mobile devices, such as smartphones or tablets. These devices may include many sensors (such as GPS/GNSS chipset, IMU platforms, barometer, altimeter, cameras, etc.) that empower customers to plan their activities (for example to know the time that it is necessary to wait a train) or to share their location on social networks. So, it seems that the goal is not when it is possible to obtain a positioning solution, but with which accuracy it can be obtained.

Another problem is to guarantee a continuity of the positioning solution, for example when a user is located outside a building and he wants to enter inside without losing the positioning information. Another one is to measure the geodetic heights using the time: today, the precision of geodetic and metrological measurements are becoming comparable, making the measuring of time for the determination of height differences interesting: this involves the use of atomic optical clocks for the futuristic "relativistic geodesy". In this speech, we discuss about these topics, trying to foresee some possible solutions.