

**Speaker:** Giacomo Sorelli, Fraunhofer Institute for Optronics, System Technology and Image Exploitation – IOSB, Ettlingen

**Title:** Online estimation of the transmission matrix of a turbulent channel

**Date:** Monday, May 6th, 15 o'clock (s.t.)

**Place:** Seminar room 915

**Title:** Online estimation of the transmission matrix of a turbulent channel

**Abstract:**

In this seminar, I will present numerical simulation results on the real-time estimation of the transmission matrix of a turbulence channel, and its use for the optimization of some metrics (e.g. total transmitted power and fiber coupling efficiency) that are relevant for communication experiments. Then, I will show preliminary results of an experimental demonstrator of this approach, and discuss possible generalization of the experimental settings that could be used in a real-world scenario.