Venerdi 8 settembre 2017, ore 11:30

Area della Ricerca CNR di Firenze - Aula 1(Edificio F)

Dr. Jonathan Ward

Okinawa Institute of Science and Technology Graduate University, Okinawa, Japan

"Whispering gallery resonators for sensing, nonlinear optics and other things"

The ability to confine light in microscopic circular orbits by a process of continuous total internal reflection has pushed optical resonators towards the extremes of optical quality, finesse and mode volume. These so called whispering gallery resonators and their morphology dependent resonances have found applications from ultra-low threshold nonlinear optics to bio and chemical sensing. Here I will show how the unique properties of hollow whispering gallery resonators can achieve improved sensing capabilities as well as greater dispersion management for visible frequency comb generation.