

**Speaker: Gustavo GRINBLAT (University of Buenos Aires, Argentina)**

**Title: Manipulating light and hypersound waves at the nanoscale**

**Abstract:** In this presentation, I will show results from resonant photonic nanostructures (nanoantennas and metasurfaces) made of metallic and dielectric materials for ultrafast light modulation (sub-100 fs), nonlinear optical frequency conversion, determining the mechanical properties of thin films in the GHz range, and controlling the directionality of hypersound waves at the nanoscale. I will also present results from two-dimensional materials in this area.