## The 196h MANA Special Seminar





Going nano: the role of boundary effects on the electrical properties of ionically and mixed conducting oxides Chair: Dr. Emiliana Fabbri (MANA Scientist)

## Dr. Giuliano Gregori

(Max Planck institute for Solid State Research, Stuttgart, Germany)

The defect chemistry of nanocrystalline materials has gained much attention in the last years, as at the nanoscale, the electrical conduction is dominated by the boundaries properties. In the present contribution, the impact of reducing the grain size on the electrical conductivity of ionically as well as mixed conducting oxides is discussed. A number of fascinating size-induced effects are presented, which emphasize the crucial role of boundaries and interfaces on the transport properties of materials such as SrTiO3 and gadolinium-doped CeO2.

Venue: Seminar Room #431, MANA Bldg.

Date: February 17th (Thu) Time: 15:30-16:15

