

venerdì 9 novembre in aula Careri

ore 13.30: Seminario del vincitore della procedura valutativa a PA SSD FIS/03 Dr. Alessandro Nucara

Titolo: Infrared signature of Charge Density Waves in oxides and the Berreman effect in 2DES materials

Abstract:

Infrared spectroscopy (IRS) is a well recognized tool for the investigation of charge dynamics in condensed matter. In this seminar, I will show the ability of IRS to detect the Charge Density Wave (CDW) ground state of some oxides, exploiting the brightness of coherent synchrotron radiation. Moreover, I will discuss on recent experiments performed in our laboratory and at synchrotron radiation facilities, aimed at revealing the Berreman effect in two-dimensional electron systems (2DES). This experimental approach provides accurate estimation of the charge density and of its mobility at the sub-wavelength scale.