

SEMINARI

principi natura modello
metodo matematica

andezze valore **fisica** generale spazio classica sistemi
teorie studio
antistica materia **dati** fenomeni grandezza
sperimentale esempio misura
fondamentali incertezze
riferimento **teoria**
nucleare relativa **FILOSOFIA**



UNIVERSITÀ
DI TRENTO

Dipartimento di
Fisica

Dr. Alessandro Pitanti

Lab. NEST, CNR – NANO & Scuola Normale Superiore, Pisa, Italy
Paul-Drude-Institut für Festkörperelektronik, Berlin, Germany

December 1st 2022 h 2.30 p.m.

(Room A204 - Povo1)

“OPTICAL AND MECHANICAL WAVE MANIPULATION IN DIELECTRIC METASURFACES”

Abstract:

Artificial structured materials – metamaterials – are the quintessential tool for controlling and manipulating all degrees of freedom of either optical or mechanical waves. In this talk I will show the application of the metamaterial concept on a dielectric optomechanical membrane, where light and vibration dynamics are coupled and strongly intertwined.

The optomechanical metasurface unveils interesting features linked to the device symmetry, including mechanical-based polarization modulation and polarimetry, anisotropy and anomalous refraction of mechanical waves and the mutual coupling of fully optomechanical Bloch modes.

Contacts:

Staff Dipartimento di Fisica
Staff di Dipartimento - Fisica
0461 28-1504-1575-2042-1545-1219
df.supportstaff@unitn.it

Scientific Coordinator:

prof. Lorenzo Pavesi