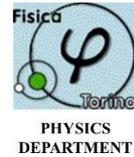




# Solid State Physics Group



## Seminar

**Dr. Muhammad Rabbani**

Physical Department

### **Probing the internal electric field in lithium niobate by nuclear microprobe**

**Monday, 6 april 2020, h. 17.30**

[Webex Virtual Room](#)

Lithium niobate (LN) is a key material in the photonic besides a tremendous use in opto-electronic and opto-acoustic devices. The presence of a large remnant polarization in lithium niobate can induce a large internal electric field as high as  $7.9 \times 10^{10}$  V/m, which in principle could have significant effects on ions passing through the material. The value of internal electric field in lithium niobate will be estimated by measuring the energy of the ions passing through the thin samples. In the presentation, I will briefly describe the properties of ferroelectric materials especially Lithium niobate, my motivation followed by objectives, expected outcomes and progress on sample preparation.