



A QUANTUM OF MATTER

Physics of Matter Ph.D. Students Welcome Day

Department of Physics, University of Trento

Wednesday November 30, 2022 - 15.00
Aula B107 – Polo Ferrari (Povo 2), Povo

It is a matter of fact that Ph.D students represent one of the leading forces in the research activities that are conducted in our department. A successful Ph.D. program should, however, not uniquely be focussed on guiding the candidate to produce—outstanding, as it is often the case—scientific results, but also on helping him/her to establish an independent network of collaborations both inside and outside the home institution, a fundamental ingredient in the development of his/her future career. This special appointment of “a Quantum of Matter” is thus devoted to welcoming the students of the 38th Ph.D. cycle in the Physics of Matter research area that have recently joined our department. Each student will provide a short presentation about his/her research activity with a twofold purpose: on the one hand, and as it is always the case for “a Quantum of Matter”, the establishment of new collaborations between research groups within the Physics Department of UniTn. On the other hand, and most importantly, the aim is to introduce the speakers of this event to the figures in the department that work in the field of Physics of Matter at all levels of career, in this way helping the new Ph.D. students to develop a solid and fruitful collaboration network since the very beginning of their academic path.

Speakers:

- **Fabio Brugnara:** “Spectroscopic techniques for the investigation of medieval trade networks”.
- **Francesco Carnovale:** “Molecular Dynamics simulations of Interleukin-22 subunit in a plasma membrane model”.
- **Andrea Corradini:** “Liquid-liquid transition in undercooled silicon”.
- **Irene Festi:** “Vibrational dynamics of ultra-stable and conventional glasses”.
- **Matteo Furci:** “Light-Tunable Ferroelectricity in GeTe”.
- **Luca Maestri:** “Sound propagation in vitreous silica studied via extreme ultraviolet transient grating spectroscopy”.
- **Margherita Mele:** “Which is the optimal resolution level to study a complex system? The more is not the better”.
- **Matteo Michielan:** “Chemistry, Lasers...and Molecular Astrophysics”.
- **Stefano Mocatti:** “Ultrafast phase transitions in SnSe”.
- **Giovanni Novi Inverardi:** “Molecular Dynamics simulations of protein fragments in amorphous silica solutions”.

A Quantum of Matter is a series of events dedicated to the research in Physics of Matter that is carried out in the **Physics Department of the University of Trento**. The goal of **A Quantum of Matter** is to develop synergies and collaborations between research groups: for this reason, the seminars will focus not only on the results obtained, but also on the techniques employed by the groups and on the possible research themes that could be developed in partnership, leaving plenty of room for exchange of opinions and discussion.
