

Grafica> UniTrento | IMG> Fototeca Trentino S.p.A. - foto di Marco Simonini; stockadobe.com

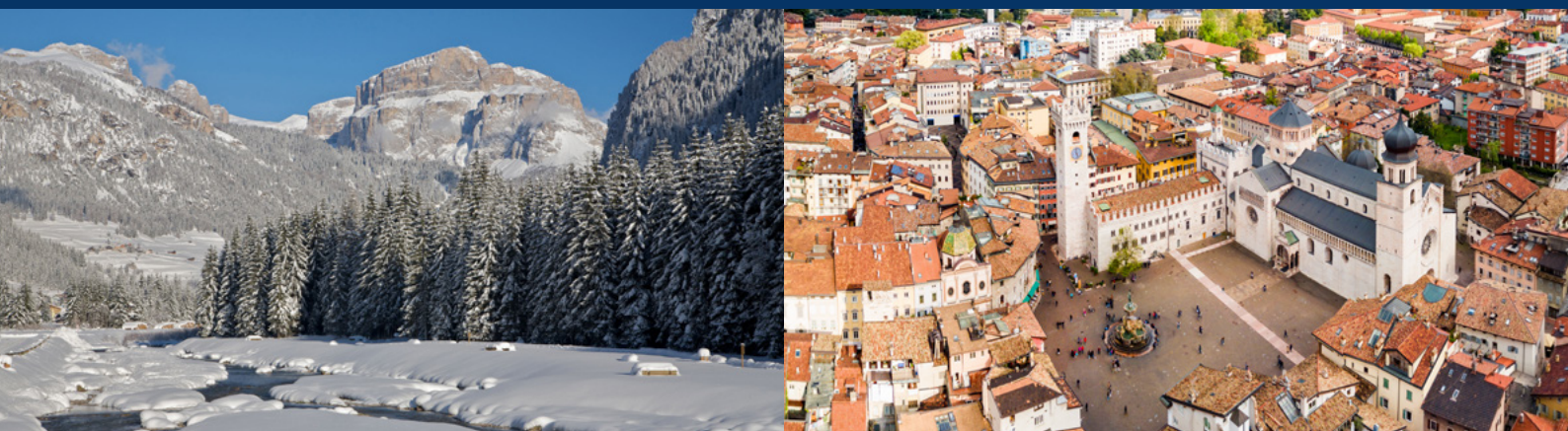


UNIVERSITÀ
DI TRENTO

Dipartimento di
Fisica

Winter School on **Physics of the Cell** (CellPhys@TN2) From 16 to 27 January 2023 Povo (Trento), Italy

2-weeks interdisciplinary winter school exploring how physical methods (experimental, theoretical and computational) can be successfully employed to describe processes occurring in living cells and to tackle biological problems of technological and medical relevance.



TARGET

Senior undergraduate and graduate international students from Physics, Chemistry, Biology, Mathematics, or interdisciplinary courses including at least one of the former among the constitutive disciplines. Good level of English needed (B2).

SEMINARS AND HANDS-ON SESSIONS

- Biology of the cell: basic constituents and processes
- Statistical mechanics and theoretical foundations of cell physics
- Experimental methods in cell physics
- Chemically accurate modelling of biological systems: all-atom simulations
- Proteins: from all-atom to coarse-grained simulations
- The cell nucleus: properties and models of RNA, DNA and chromatin
- Medical Biophysics
- and more...

SOME GOOD REASONS TO APPLY

- Lectures, hands-on sessions
- Develop the ability to: identify the main experimental techniques and possible modelling strategies to investigate the cell; interact with scientific instruments and scientific software for the visualisation and study of biomolecular complexes and assemblies; determine the interconnections between the different components of the cell with models and quantitative predictions;
- 6 ECTS credits
- interact in a multidisciplinary context on an equal level and in a group
- International networking
- Chance to work in peers with tutoring
- Social program
- Outdoor activities
- Enjoy the beautiful environment of the Dolomites

DEADLINES

Nominations by partner universities: **15 October 2022**

Applications by students: **31 October 2022**

PARTICIPATION COSTS

€ 400 for students from partner institutions

€ 1.000 for all other students

Include: welcome and farewell lunch, most meals, academic instructions, cultural activities, excursions, company visits, and certificate of attendance.

CONTACT AND INFO

International Relations Division

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international.unitn.it/incoming/summer-and-winter-schools