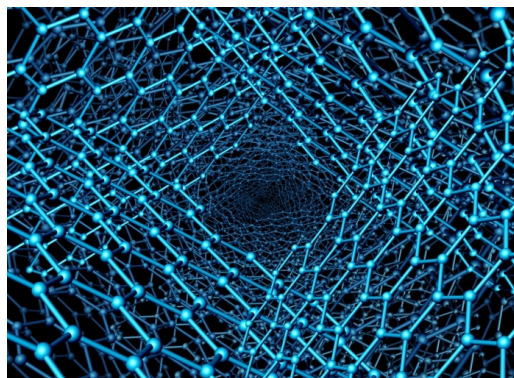




Topological Matter School (TMS2026)



17.Aug - 21.Aug 2026

Cod. Z63-26

Mod.:

Face-to-face

Edition

2026

Activity type

Workshop

Date

17.Aug - 21.Aug 2026

Location

Miramar Palace

Languages

English

Academic Validity

50 hours

Web

<https://tms-dipc.org/>

Organising Committee



Description

The 2026 edition of the Topological Matter School marks a double celebration: ten years since the Nobel Prize in Physics recognizing the impact of topology, and the tenth anniversary of the school itself. Founded in 2016, the school has become one of the leading international forums dedicated to teaching and advancing topology in condensed matter physics.

This special anniversary edition will reflect on a decade of remarkable progress, with a program of pedagogical lectures reviewing how the field has evolved and where it is heading. We are deeply honored that **Prof. Duncan Haldane, Nobel Laureate in Physics 2016**, will deliver the **opening lecture**.

Topics to be covered:

- Review of **topological classifications and invariants** developed over the past decade
- Advances in **effective models for topological insulators, semimetals, and superconductors**
- New paradigms in **correlated and magnetic topological phases**
- Progress in **first-principles approaches** to topological materials discovery
- Integration of **high-throughput screening, symmetry analysis, and data-driven methods**
- Development of **real-space and Green's-function diagnostics** bridging theory and computation
- Key milestones in **ARPES, STM/STS, transport, and spectroscopy** confirming topological phenomena
- Discovery of **novel quantum materials** and **emergent quasiparticles**
- Synergy between **theoretical predictions** and **experimental realizations**

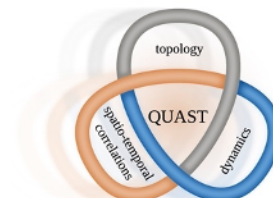
ORGANIZING COMMITTEE:

- Maia G. Vergniory (DIPC, Université de Sherbrooke, Canada)
- Reyes Calvo (BC Materials)
- Santiago Blanco-Canosa (DIPC, Ikerbasque)
- Adolfo Grushin (DIPC, Ikerbasque)
- Alexander Altland (University of Cologne)
- Julen Ibañez Azpiroz (CFM, Ikerbasque)

Objectives

We seek for a week of reflection and forward-looking discussion on the future of topological quantum matter.

Course specific contributors



Directed by



Maia García Vergniory

Donostia International Physics Center

Registration fees

REGISTRATION FEES

UNTIL 19-07-2026

Fee Waiver

0 EUR

Regular Attendant

400,00 EUR

Place

Miramar Palace

Pº de Miraconcha nº 48. Donostia / San Sebastián

Gipuzkoa