

# **Topological Matter School 2019 (TMS19)**

## 19.Aug - 28.Aug 2019

Cod. Z17-19

**Mod.:** Face-to-face

**Edition** 2019

Activity type Workshop

**Date** 19.Aug - 28.Aug 2019

**Location** Miramar Palace and Donostia International Physics Center

Languages English

Academic Validity 50 hours

Web http://tms.dipc.org

#### **Organising Committee**











## Description

The Topological Matter School 2019 will feature lectures on topological classification, topological insulators, superconductors, and semimetals, the Integer and Fractional Quantum Hall states, anyons and topological order. Over one week, the school will provide extended lectures on these exciting topics by leading experts in both experiment and theory. The following topics will be covered:

- Topological classification.
- Topological Quantum Chemistry and the symmetry indicators.
- Experimental techniques such as growth, transport measurements and ARPES.
- Long range strong interactions such as Fractional Quantum Hall Effect, including theoretical lectures and talk about the main experiments.

After school there will be an optional course to give the opportunity to students to get in touch with Machine Learning in Condensed Matter Physics.

#### ORGANIZING COMMITTEE:

- Maia García Vergniory, Ikerbasque Research Fellow at DIPC, Donostia-San Sebastian (chair).
- M. Reyes Calvo, Ikerbasque Research Fellow at CIC Nanogune, Donostia-San Sebastián.
- Fernando de Juan, Ikerbasque Research Fellow at DIPC, Donostia-San Sebastian (chair).
- Adolfo Grushin, Institut Néel , Grenoble, France.
- Barry Bradlyn, University of Illinois Urbana-Champaign, Urbana, USA.
- Erwan Bocquillon, CNRS Researcher at Laboratoire Pierre Aigrain, Paris, France.

#### Objectives

The aim of this oneweek school is a meeting targeting young researchers, as master and graduate students, for introducing the participants to the young field of topological states of matter as well as the latest advances.

The main goal is to cover basic and advanced aspects of the field, including the so interesting long range strong topological interactions.

#### **Course specific contributors**







## Directed by



Maia García Vergniory

Donostia International Physics Center



#### Fernando de Juan Sanz

Donostia International Physics Center

## **Registration fees**

FEE WAIVER	UNTIL 19-08-2019
FEE WAIVER	0 EUR
TMS2019 SCHOOL + SATELLITE COURSE	UNTIL 19-08-2019
TMS2019 school + SATELLITE course	550,00 EUR
TMS2019 SCHOOL ONLY	UNTIL 19-08-2019
TMS2019 school only	350,00 EUR
SATELLITE COURSE ONLY	UNTIL 19-08-2019
SATELLITE Course only	200,00 EUR

### Place

#### Miramar Palace and Donostia International Physics Center

Pº Miraconcha 48, 20007 Donostia/San Sebastián and Paseo Manuel Lardizabal, 4, 20018 Donostia/San Sebastián

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