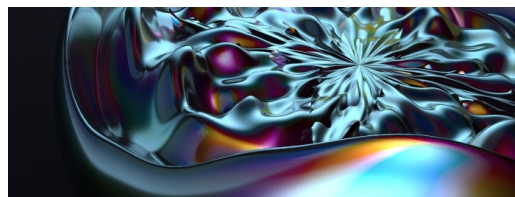




Topological Matter School 2024 (TMS24)



19.Aug - 23.Aug 2024

Cod. Z18-24

Mod.:

Face-to-face

Edition

2024

Activity type

Workshop

Date

19.Aug - 23.Aug 2024

Location

Miramar Palace

Languages

English

Academic Validity

50 hours

Web

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

Organising Committee



Description

Flat band materials offer a platform for enhancing correlation effects, rendering them an area of significant current interest. They present exceptional opportunities for exploring topology in correlated settings and correlation physics enriched by topology. Recent experiments on correlated kagome metals and moiré systems have unveiled evidence of peculiar behaviors, including strange-metal characteristics, charge density waves, nematic orders, and fractional Chern insulators within flat-band materials.

The following topics will be covered:

- Introduction to band theory and symmetry indicators
- Topological Flat bands and quantum geometry
- Heavy fermion systems
- Morie systems
- Kagome metals and charge density waves
- Strange metals

ORGANIZING COMMITTEE:

Maia G. Vergniory (DIPC, Max Planck)

Reyes Calvo (Universidad de Alicante)

Santiago BlancoCanosa (DIPC, Ikerbasque)

Adolfo Grushin (Institut NEEL – CNRS)

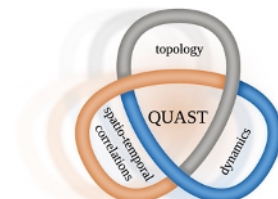
Alexander Altland (University of Cologne)

Julen Ibañez Azpiroz (CFM, Ikerbasque)

Objectives

Throughout this school, our objective is to delve into the study of flat bands and these systems, as well as the intriguing physical phenomena they manifest, under the guidance of world-leading experts

Course specific contributors



Directed by



Maia García Vergniory

Donostia International Physics Center

Teachers



Alexander Altland



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ICFO



Päivi Törmä

Aalto University



Stephen Wilson

UC Santa Barbara



Ming Yi

Rice University



Zhida Song

Peking University

Registration fees

REGISTRATION FEES	UNTIL 23-07-2024
Fee Waiver	0 EUR
Regular Attendant	400,00 EUR

Place

Miramar Palace

Pº de Miraconcha nº 48. Donostia / San Sebastián

Gipuzkoa