

Topological Photonics Workshop 2022 (TopoPhoto2022)



01.Jun - 03.Jun 2022

Cod. Z03-22

Mod.:

Face-to-face

Edition

2022

Activity type

Workshop

Date

01.Jun - 03.Jun 2022

Location

Donostia International Physics Center

Languages

English

Academic Validity

30 hours

Web

http://topophoto2022.dipc.org

Organising Committee









Description

During the past decades, the state of the art in the field of Materials Science has been profoundly leaded by the discovery of topological insulators and the subsequent understanding of topological materials.

Topological insulators are very special materials which behave as insulators in their interior, but that can support conducting states on their surface. These "surface states" are symmetry protected, meaning that, defects in the material cannot destroy them easily. On top of that, these topological edge states are generally protected against backscattering. This last feature implies that if energy (or information) is flowing in one particular direction through the surface of a topological insulator, it will continue flowing in that particular path even if it finds obstacles on its way. The study of the exotic properties of these novel materials is an incredibly interesting area of research in basic science and could facilitate fantastic engineering applications.

Topological states of matter were first discovered in the field of solid-state physics but recent contributions are proving their existence in diverse physical platforms. To mention a few, topological surface states have been recently identified in the fields of optics, acoustics and in excitonic and polaritonic materials.

ORGANIZING COMMITTEE:

Aitzol Garcia-Etxarri, DIPC, Donostia

Paloma Arroyo Huidobro, Instituto de Telecomunicações, Lisbon, Portugal

Objectives

This workshop is aimed at gathering a critical mass of people working in the vibrant area of Topological Photonics as well as topology in other wave phenomena.

It will provide researchers in Topological photonics with a platform to learn and share the most recent advances in the field.

Course specific contributors



Directed by



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Teachers



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Registration fees

REGISTRATION FEES	UNTIL 26-05-2022
Attendant	350,00 EUR

Place

Donostia International Physics Center

Paseo Manuel Lardizabal, 4, 20018 Donostia/San Sebastián

Gipuzkoa