# Topological States of Matter (TopoStates)

## 05.Sep - 10.Sep 2016

### Cod. 060-16

**Modalité:**
En personne

**Édition**
2016

**Type d'activité**
Workshop

**Date**
05.Sep - 10.Sep 2016

**Location**
Miramar Palace

**Langues**
Anglais

### Comité d'organisation

# Description

Website of the congress: http://topostates.dipc.org/

Topological quantum matter represents a new class of materials which are characterized by non-local topological properties emerging from purely local (microscopic) degrees of freedom. Our understanding of topological states of matter has been broadened enormously over the last decade. The progress on the theoretical end includes, for example, the prediction of topological insulators and superconductors as well as the exploration of the interplay between symmetry and topology with an aim to classify topological states. A remarkable progress has been also made on the experimental front. Inspired by the theoretical predictions, experimentalists in laboratories across the world are now trying to realize the simplest topological quantum states. Among them much attention attracted Majorana systems, e.g. superconductors that support Majorana zero-energy modes (Majoranas). It is believed that the defects carrying these modes obey non-Abelian statistics and, as such, might be of potential use for quantum computing. There has been remarkable experimental progress in the quest to find Majoranas in various superconducting heterostructures involving semiconducting wires, ferromagnetic chains, and quantum spin Hall materials.

## Collaborateurs spécifiques au cours

## Directed by

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# Tarifs inscription

| REGISTRATION | JUSQU'AU 10-09-2016 |
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| GENERAL | 150,00 EUR |