

# Silicon Quantum Electronics Workshop 2019 (SiQEWS2019)

**14.oct - 16.oct 2019**

**Cod. Z25-19**

**Modalité:**

En personne

**Édition**

2019

**Type d'activité**

Workshop

**Date**

14.oct - 16.oct 2019

**Location**

Ignacio M<sup>a</sup> Barriola Zentroa

**Langues**

Anglais

**Reconnaissance officielle par l'État**

30 heures

**Comité d'organisation**



## Description

The Silicon Quantum Electronics Workshop focuses on silicon-based approaches to realizing quantum electronics circuitry such as quantum computers. This workshop is the 2019 edition of a series of workshops on silicon quantum electronics that have taken place roughly once a year since 2007.

During the workshop the following topics will be discussed:

- Qubit implementations in silicon and silicon-germanium,
- Advances in materials and fabrication,
- Cryogenic classical (nano)-electronics and classical electronic interfaces with qubits,
- Computer-assisted design and analysis of dopant and quantum dot architectures,
- Theory and modeling of charge and spin decoherence mechanisms in silicon,
- Quantum error correction for Si and SiGe qubits,
- Approaches to multi-qubit and coherent on-chip communication,
- Hybrid-qubit approaches combining Si and/or SiGe with other qubit systems.

### Organizing committee:

María José Calderón, Instituto de Ciencia de Materiales de Madrid (CSIC)

Fernando González-Zalba (Hitachi Laboratory Cambridge)

Rubén Ochoa (DIPC and Hitachi Laboratory Cambridge)

Gloria Platero (Instituto de Ciencia de Materiales de Madrid, CSIC)

José Carlos Abadillo-Uribarri (University of Wisconsin-Madison)

### Objectifs

The purpose of the workshop is to unite the leading researchers, students, and postdocs in the field to discuss advances in silicon quantum device fabrication, measurement, modeling, and theory.

### Collaborateurs spécifiques au cours



## **Directed by**



**María José Calderón**

Instituto de Ciencia de Materiales de Madrid (CSIC)

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## **Tarifs inscription**

### **REGISTRATION FEES**

**JUSQU'AU 14-10-2019**

Attendant fee	100,00 EUR
Reserved organization	0 EUR