# MONACOSTE summer school



Modeling Nanomaterials for **Energy Transport and Storage** 

08th May-13th May 2022, Villa Clythia, Fréjus, France (French Riviera)

Website :

https://tinyurl.com/monacoste



SCOPE : Designing new materials to store or convert waste energy is becoming an urgent challenge for the 21st century. Numerical techniques are becoming essential to tackle this challenge. Indeed, these last years have seen the flourishing development of new methods to model matter at nanometric scales. The objective of the summer school "Modeling of nanostructured materials for energy conversion and transport" is to train scientists in numerical techniques and tools for the modeling of energy transport and conversion in nano-structured materials

#### **Topics covered**

**Phonon transport Electronic transport** Near field radiation Thermoelectricity **Ionic tranport** 

### **Speakers**

Nathalie Vast **Evelyne Martin** Marc Bescond **Xavier Alvarez Giorgia Fugallo** 

### Organizers

**Giorgia Fugallo Manuel Cobian Konstantinos Termentzidis** Samy Merabia

**Molecular dynamics** Ab initio calculations Artificial intelligence **Finite element modeling Monte Carlo methods** 

**Photovoltaics Thermophotovoltaics Complex** crystals **Amorphous materials** 

**Emilie Gaudry Aloïs Würger Anne Tanguy Fabienne Michelini Tristan Albaret** 

**Mohamed Amara David Lacroix** Lorenzo Paulatto Jérôme Saint Martin **Pascal Boulet** 

## Scientific committee

Philippe Ben Abdallah **Emilie Gaudry David Lacroix** Jérôme Saint Martin Anne Tanguy **Konstantinos Termentzidis** 







