

# International Thematic School on OPTOMECHANICS & NANOPHONONICS

Ecole thématique du CNRS



**April 17-28, 2023**

The Houches Physics School, Chamonix Mont Blanc Valley, France

The study of the interaction between photons and phonons is a rapidly developing research field. Initially, it emerged to answer fundamental questions about thermal properties, nanomechanics, and quantum measurements. These questions constitute today the basis for new studies feeding fundamental and technological challenges.

This school aims to overview this interdisciplinary field by treating quantum concepts and effects, simulation, sensors, metrology, and ultra-sensitive detection among other fundamental effects and applications.

**Twelve outstanding lecturers** will cover a broad spectrum going from the theory of Photon-phonon interaction and their characterization to the most advanced Photon-phonon interaction devices :

**Yiwen CHU** (ETH Zurich – CH), **Ivan FAVERO** (CNRS - Université Paris-Cité - MPQ - FR), **Christophe GALLAND** (EPFL - CH), Gabriel HÉTET (LPENS - FR), **Andreas NUNNENKAMP** (University of Vienna – AT), **Samuel RAETZ** (Université Le Mans – FR), **Peter RAKICH** (Yale University - USA), **Paulo SANTOS** (Paul Drude Institute - Berlin – GE), **Albert SCHLIESSER** (Niels Bohr Institute - DK), **Birgit STILLER** (Max Planck Institute – GE), **Laura THEVENARD** (CNRS- Sorbonne Université, INSP - FR), **Ewold VERHAGEN** (AMOLF – NL)

**Attending a thematic school is a unique opportunity to learn, share and connect with top leaders in the field. The school is designed for students and researchers using optical methods and for physicists participating in their development.**

**Application deadline (short motivation letter + CV): November 22, 2022**

[www.sfoptique.fr](http://www.sfoptique.fr)

<https://www.sfoptique.org/pages/sfo/ecoles-thematiques/2023-optomecanique-nanophononique/>