

Winter School on Physics with Trapped Charged Particles

Les Houches, France, January 8-19, 2018

Lectures and Tutorial Sessions Covering

Physics of confinement
Dynamics in Penning and Paul traps
Diagnostic techniques
Physics of non-neutral plasmas
Trapped highly charged and radioactive ions
Space charge effects and Coulomb crystals
Charged particle beams
Quantum information processing in traps
Quantum simulation in traps
Laser cooling and other cooling techniques
Applications for fundamental tests, spectroscopy and clocks
Novel trap designs

Confirmed speakers :

Caroline Champenois (CNRS/Aix-Marseille University)
Christian Roos (University of Innsbruck)
Dan Dubin (UC San Diego)
François Anderegg (UC San Diego)
Jeffrey S. Hangst (Aarhus University)
Joel Fajans (UC Berkeley)
Martina Knoop (CNRS/Aix-Marseille University)
Michael Drewsen (Aarhus University)
Niels Madsen (Swansea University)
Piet O. Schmidt (PTB)
Richard Thompson (Imperial College London)
Roland Wester (University of Innsbruck)
Stefan Ulmer (RIKEN)
Sven Sturm (MPIK Heidelberg)
Thomas Sunn Pedersen (Max-Planck Institute of Plasma Physics)

Organising Committee :

Prof. Niels Madsen (Swansea University) (chair)
Dr. Martina Knoop (CNRS/Aix-Marseille University)
Prof. Richard Thompson (Imperial College London)
Dr. William A. Bertsche (University of Manchester)

Advisory Committee :

Prof. Klaus Blaum (MPI Heidelberg)
Prof. Michael Drewsen (Aarhus University)
Prof. Joel Fajans (UC Berkeley)
Prof. Piet O. Schmidt (PTB)

Les Houches is a village located in Chamonix valley, in the French Alps. Established in 1951, the Physics School is situated at 1150 m above sea level in natural surroundings, with breathtaking views on the Mont-Blanc mountain range. Les Houches Physics School is affiliated with Université Joseph Fourier Grenoble I (UJF). The school is a joint interuniversity facility of UJF and Grenoble-INP, and is supported by the UJF, the Centre National de la Recherche Scientifique (CNRS) and the Direction des Sciences de la Matière du Commissariat à l'Energie Atomique (CEA/DSM). Ecole de Physique des Houches, Côte des Chavants, F-74310 Les Houches, France. <http://houches.ujf-grenoble.fr>