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

For further information consult: http://indico.cern.ch/e/pwtcp2018 or contact (secretary): cinzia.pinzoni@cern.ch