

3rd Juhannus Distinguished Lecture in Physics



by

Nobel Laureate
Prof. Anne L'Huillier

The Physics Unit of Tampere University is proud and honoured to announce, that

Prof. Anne L'Huillier

Lund University, Lund, Sweden

will give a **public lecture** at Tampere University

Wednesday, August 26th at 17:00 o'clock

Main Auditorium A210 – City Centre Campus, Main Building

Anne L'Huillier is a Swedish/French researcher in attosecond science. She started her career at the Commissariat à l'Énergie Atomique, in Saclay, France, as a PhD student until 1986, then as a permanent researcher until 1995. She was postdoc at Chalmers Institute of Technology, Gothenburg, Sweden in 1986, and at the University of Southern California, Los Angeles, USA in 1988, and a visiting scientist at the Lawrence Livermore National Laboratory in 1993. She moved to Lund University, Sweden, and became full professor there in 1997. Her research is focused on high-order harmonic generation in gases and its applications, particularly in attosecond science. She was awarded the Nobel Prize in Physics 2023 together with Pierre Agostini and Ferenc Krausz “for experimental methods that generate attosecond pulses of light for the study of electron dynamics in matter.

In her public lecture, Prof. L'Huillier will talk about:

The world of atoms at the attosecond time scale

When an intense laser interacts with a gas of atoms, high-order harmonics are generated. In the time domain, this radiation forms a train of extremely short light pulses, of the order of 100 attoseconds. Attosecond pulses enable the study of electron dynamics in atoms and molecules using pump-probe techniques. This presentation will highlight key steps in the field of attosecond science.