

# News from the ILL ultracold neutron physics program

Peter Geltenbort<sup>(1)</sup>

*(1) Institut Laue-Langevin, 71 avenue des Martyrs, 38000 Grenoble, France*

The Institut Laue-Langevin (ILL) is an international research centre at the leading edge of neutron science and technology. As the world's flagship centre for neutron science, the ILL provides scientists with a very high flux of neutrons feeding some 40 state-of-the-art instruments, which are constantly being developed and upgraded.

The instruments of the nuclear and particle physics group (NPP) and their fields of research are briefly presented.

ILL's two ultracold neutron installations are described in more detail.

The on going research programme using ultracold neutrons as measuring the lifetime of the free neutron, the search for an electric dipole moment and gravity resonance spectroscopy neutrons are highlighted.

## About the speaker

Peter W.H. Geltenbort received a Ph D from the University of Tuebingen, Germany, in 1983. He joined the Nuclear and Particle Physics (NPP) College at the ILL in 1983 responsible for a fission fragment spectrometer. From 1989 to 1993 he held the position of Head of the Detector Group. In 1993 he reintegrated into the NPP College responsible for the Ultra-Cold Neutron/Very Cold Neutron facilities at the ILL. His current research interests are the fundamental properties of the neutron.