## LNGS SEMINAR SERIES

## Klaus Kirch

ETH Zürich & PSI Villigen

## Precision particle physics at PSI

The ring cyclotron at the Paul Scherrer Institut delivers a 1.4MW proton beam to targets and produces world record intensities of low momentum pions, muons and ultracold neutrons. Complementary to particle physics at the highest energies, precision experiments with high particle intensities at low energies can be uniquely sensitive to new physics. The talk will present some experiments challenging our understanding of the baryon asymmetry of the universe, of charged lepton flavor violation and of the strong and electro-weak interactions of the Standard Model of particle physics.