

# QCD Axion Search with ILC Beam Facility

*jeudi 2 juin 2022 16:10 (20 minutes)*

One of the most promising methods to search for axions is a light-shining-through-walls (LSW) experiment. In this talk, I will discuss the possibility of performing an LSW experiment at the ILC experiment, where photon beams are generated for positron production. The photon beam is energetic and intense; the energy is of order MeV and the number of photons is about  $10^{24}$  per year. Due to the high energy and intensity, this LSW experiment can reveal the parameter region of the axion unexplored by previous ground-based experiments.

**Orateur:** SHIRAI, Satoshi (Kavli IPMU)

**Classification de Session:** Parallel session 3