

## Status of the ALPS II Experiment

*Tuesday 9 August 2022 11:30 (20 minutes)*

The Any Light Particle Search II (ALPS II) experiment will search for axion-like particles (ALPs) in an important parameter space that is relevant in understanding anomalous astrophysical phenomena, including stellar evolution. ALPS II takes advantage of the axion coupling to photons using a Light-Shining-through-a-Wall technique. Photons created using a strong laser may convert into ALPs in the presence of a strong magnetic field, traverse a light-tight barrier, reconvert into photons in another strong magnetic field, and be subsequently detected. By using two mode-matched optical resonators before and after the barrier, ALPS II aims to surpass the sensitivity of previous experiments by three orders of magnitude. In this talk, we will discuss the recent progress and current status of ALPS II as we move forward toward our first science run at DESY.

**Primary author:** OTHMAN, Gulden (University of Hamburg)

**Presenter:** OTHMAN, Gulden (University of Hamburg)

**Session Classification:** Contributed talks