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## The ALPS II First Science Run

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The Any Light Particle Search II (ALPS II) is a light-shining-through-a-wall (LSW) experiment located at DESY in Hamburg, Germany, that is searching for axions and axion-like particles in the mass range below 0.1 meV. LSW experiments take advantage of the potential interaction between axions and two photons by shining a laser through a region of high magnetic field. This creates an axion field that travels through a wall, which blocks the laser light. On the other side of the wall, the axion field travels through another region with a high magnetic field where a portion of its power converts back to an electromagnetic field that can then be measured. The experiment is hosted by DESY to utilize the superconducting magnets, tunnels, and cryogenic infrastructure that were formerly part of the HERA accelerator. To enhance the sensitivity of the experiment, ALPS II employs a sophisticated optical system with 100 m optical cavities, a control architecture relying on precision interferometry, and a heterodyne detection system capable of measuring powers on the order of single photons per day. Now, nearly 10 years since the publication of the ALPS II TDR, the experiment has begun the first science run. This talk will give a brief overview of the experiment, discuss the lessons learned during the commissioning phase, and present the first results from the science run.

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