

NAME: **Andreas Ringwald**

Email: Andreas.Ringwald@desy.de

AFFILIATION: DESY

TITLE: Light Propagation in a Magnetic Field as a Probe of Weakly Interacting Sub-eV Particles

ABSTRACT: We discuss the theoretical predictions of the effects of new sub-eV particles with tiny coupling to electromagnetism (e.g. axions, dilatons, paraphotons, mini-charged particles) on the propagation of polarized light through a transverse magnetic field. We confront these predictions with currently available data from the laser polarization experiments BFRT, PVLAS, and Q&A.