



Contribution ID: 26

Type: Oral presentation using Zoom

## Probing new physics with a LUXE-type experiment at the ILC

*Wednesday, 27 October 2021 19:30 (30 minutes)*

The proposed LUXE experiment (LASER Und XFEL Experiment) at DESY, Hamburg, using the 16.5 GeV electron beam from the European XFEL, aims to probe QED in the non-perturbative regime created in collisions between high-intensity laser pulses and high-energy electron or photon beams. This setup also provides a unique opportunity to probe physics beyond the standard model by leveraging the large photon flux generated at LUXE, probing axion-like-particles (ALPs) at a reach comparable to FASER2 and NA62. In this contribution we will explore the sensitivity of a LUXE-type experiment using the ILC electron beam instead of the EUXFEL one.

### 1st preferred time slot for your oral presentation

19:00-21:00 JST (12:00-14:00 CEST, 6:00-8:00 EDT, 3:00-5:00 PDT)

### 2nd preferred time slot for your oral presentation

15:30-17:30 JST (8:30-10:30 CEST, 2:30-4:30 EDT, 23:30-1:30 PDT)

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**Session Classification:** O-1: Fixed target / Dark sectors / Applications outside particle physics

**Track Classification:** Parallel sessions: Transversal Task Forces: Session O: Fixed target / Dark sectors / Applications outside particle physics