Type: On-site planned, but remote also possible

# High precision polarized photons at future lepton colliders

The potential of future electron and muon colliders can only be assessed with the help of precision theoretical predictions. This applies especially to the description of exclusive photon radiation. There are many theoretical approximations, that become theoretically demanding when lepton beams and/or photons are polarized. Several theoretical approximations are to be investigated regarding their numerical precision and quality. Depending upon the progress this can be extended towards new physics searches with photon backgrounds or precision calculations/simulations for processes with photons.

#### **Field**

**B5: Theory of Elementary Particles** 

### **DESY Place**

Hamburg

#### **DESY Division**

FH

## **DESY Group**

Theory

## **Special Qualifications:**

Knowledge in basics of advanced quantum mechanics and quantum field theory and connection to software might help, though is not necessary

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