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Title :

**Observation of light-by-light scattering by ATLAS experiment
and the search of exotic particles with ANTARES neutrinos Telescope**

Light-by-light (LbyL) scattering is a very rare process allowed in Quantum Electrodynamics via a loop diagram. In this talk we discuss the first direct observation of LbyL scattering established by ATLAS Collaboration using 2018 Pb+Pb dataset. Also, an updated search for Magnetic Monopoles and nuclearites using data taken with the ANTARES detector will be presented.

The precise measurement of this process is potentially sensitive to contributions from Beyond Standard Model. Despite the small cross-section, the LbyL scattering can be observed in ultra-peripheral high energy heavy-ion collisions due to strong electromagnetic fields accompanying the lead beam.