

Preliminary data analysis of OSQAR-CHASE results

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The OSQAR experiment has been extended to the quest of chameleon particles, i.e. particles with environment-dependent mass, from the search of a magnetic afterglow effect. OSQAR-CHASE (chameleon afterglow search) has been run in 2015 using one spare LHC dipole providing a 9 T transverse magnetic field with an 18.5 W DC laser and state-of-the art CCD detector. The principle of the experiment will be reminded. All possible sources of photons have been thoroughly scrutinized and dedicated simulations of the expected signal performed. Preliminary analysis of recorded data will be presented and discussed. An overview of recent experimental results on Chameleon search by similar or other methods will also be given.

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