

Cancelled

Thursday, July 5, 2018 10:00 AM (1 minute)

The CAST-IBS/CAPP experiment is a joint effort between the CERN Axion Solar Telescope (CAST) collaboration [1] and the Center for Axion and Precision Physics Research (IBS/CAPP) [2], searching for cold dark matter axions.

In this project, tunable rectangular cavities are inserted in the 9T CAST dipole magnet, an LHC prototype, at CERN.

The traditional haloscope technique first suggested by Sikivie [3] is, for the first time, applied in a rectangular geometry configuration, rather than the common cylindrical geometry. The status and expected sensitivity of the experiment are presented.

[1] CAST Collaboration, K. Zioutas et al., *Phy. Rev. Lett.* 94 (2005) 121301.

[2] http://capp.ibs.re.kr/html/capp_en/

[3] P. Sikivie, *Phys. Rev. Lett.* 51, 1415 (1983).

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