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## **CAST micromegas background in the Canfranc Underground Laboratory**

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The micromegas group working for CAST is devoting a substantial effort towards a deep understanding of the very low background levels observed in the detectors installed in the experiment which, since the implementation of shielding and the introduction of the microbulk technology, are as low as to  $\sim 5 \times 10^{-6}$  keV-1s-1cm<sup>-2</sup> in the axion energy range. A replica of the CAST set-up has been dedicated to background studies and is currently installed in the Canfranc Underground Laboratory under 2500 m.w.e. in the Spanish Pyrenees. The suppression of cosmic rays allows to upgrade the shielding and learn about the nature of CAST detectors background. The obtaining of a first upper limit  $< 2 \times 10^{-7}$  keV-1s-1cm<sup>-2</sup> for the intrinsic background of the detector itself will be discussed. This study is also interesting for the application of microbulk micromegas detectors for other Rare Events scenarios different than CAST.

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