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## **Axion dark matter search at CAST with the RADES detector**

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Cosmological and astrophysical observations predict that around 25% of the energy content of the universe is made of dark matter. The nature of dark matter is currently unknown and a lot of effort is placed in the hunt for dark matter. One of the candidates for dark matter is the axion, a particle first introduced to solve the strong Charge-Parity problem of the Standard Model.

The CERN axion solar telescope (CAST) is well known for its investigations of axions coming from the sun. However, in recent years the CAST Collaboration has in parallel introduced relic axions searches, using the haloscope method. In this talk we will introduce the Relic Axions Detector Exploratory Setup (RADES) detector geometries and present the analysis strategy on a first data set acquired in 2018 with a pathfinder cavity. The results show the potential of this type of detectors to reach QCD axion sensitivity.

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