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Axion search at the Grenoble Axion Haloscope (GrAHal) platform: Current results and Developments

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Current results and developments for the Dark Matter halo axion search in the microwave range at the Grenoble Axion Haloscope platform will be presented.

In particular the possibilities offered by the Grenoble hybrid magnet currently under commissioning will be highlighted. These include the prospects of axion search below 500 MHz at DFSZ sensitivity, in collaboration with CAPP (GrAHal-CAPP project). The unique superconducting coil to be used (9T/800mm bore diameter), the special haloscope cryogenic design, and target axion search domain will be presented.

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