

# Searching for Axion Dark Matter with the ORGAN Experiment

*Thursday 27 March 2025 15:20 (15 minutes)*

located at the University of Western Australia in Perth, Australia, the ORGAN (Oscillating Resonant Group AxioN) experiment is a microwave cavity axion haloscope that searches for axions in the 15–50 GHz mass range from the putative axion-photon coupling term  $g_{agg}$ , which began in 2017 [1]. The experiment has undergone several experimental runs, which will be detailed in this presentation [1-5]. We have also undertaken and proposed several experiments in lower mass ranges [5,6], including experiments that search for extra axion-photon coupling terms,  $g_{EM}$  and  $g_{MM}$ , if the high-energy magnetic monopole exists [5-9], which will also be detailed in this presentation.

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