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## Supax - A new superconducting axion search experiment @ Mainz

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Axions, the famous hypothetical particle that explains the absence of CP violation in QCD is also an exciting candidate for dark matter.

At Mainz we're currently constructing a new experiment utilizing superconducting RF cavities in a 14T magnetic field to search for axions in the  $8.4\,\mathrm{GHz}$  range. In this talk the physics reach of the experiment will be discussed as well as the status and first test-results of our prototype cavity.

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