



“Invisible” Axion Search Methods.

Wednesday, 29 June, 2022

Sem. Room 4a+b in buildg. 1b & Webcast 14:30 h

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The axion is a hypothetical particle proposed, over 40 years ago, to explain why the strong interactions are P and CP invariant. Additional motivation for the axion derives from the fact that a cold population of axions is naturally produced in the early universe. These cold axions may constitute the dark matter today. I'll briefly review the limits on the axion from particle physics, stellar evolution and cosmology. The constraints imply that its interactions are extremely weak, so much so that the axion was once thought “invisible”.

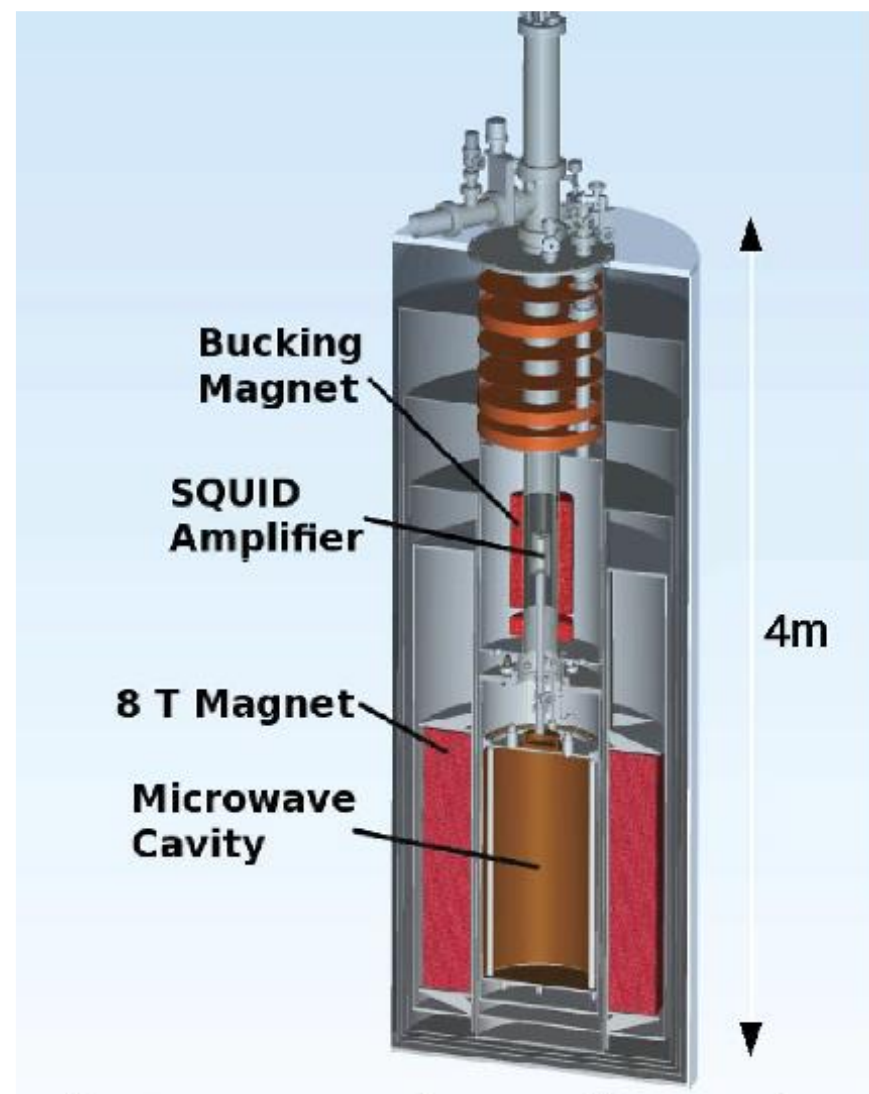
Nonetheless a number of methods have been proposed to detect so-called “invisible” axions and a world-wide campaign is under way to look for them. I'll describe these techniques, the experiments that implement them, and the results that have been obtained so far.

Please note:

This is a HYBRID COLLOQUIUM!

Meeting ID: 996 1652 8733

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