

Axion Searches

The axion provides a solution to the Strong CP Problem of particle physics and is a candidate for the cold dark matter of the Universe. I'll briefly review the constraints 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.

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