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TITLE: SELECTED TOPICS IN EXPERIMENTAL SEARCHES FOR AXIONS

ABSTRACT

Since the hypothesis of the existence of the axion, they have been searched for at accelerator beam dumps, from radioactive sources, with intense lasers and free electron lasers, and from the sun. We will discuss a number of these techniques, but will concentrate on the principles of Sikivie Helioscopes (CAST for example), coherent Bragg Conversion in large single crystal arrays, and production and excitation of M1 nuclear transitions. The intended audience will be a mixture of graduate students and specialists in the field, one of the motives will be to stimulate discussion of where the experimental effort should go next.