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Searching for low mass axions with an LC-circuit¹ N. CRISOSTO, P. SIKIVIE, N.S. SULLIVAN, D.B. TANNER, Univ of Florida - Gainesville, ADMX COLLABORATION — Axions are a promising cold dark matter candidate. Axion haloscopes such as ADMX, which use the conversion of axions to photons in the presence of a magnetic field, are used to search for axions which decay into microwave photons. To search for lighter, low frequency axions in the unexplored sub 10⁷ eV (50 MHz) range a tunable LC circuit has been proposed. Progress in the development of such an LC circuit based search will be presented. The use of both electrical and mechanical tuning mechanisms will be included.

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