

Abstract Submitted
for the NES06 Meeting of
The American Physical Society

Revisiting the Possibility of Resonant Decay of Axions into Photons ANDREW PAWL, NAPS — We revisit the possibility that the coherently oscillating axion field undergoes resonant decay through its anomaly-generated coupling to the electromagnetic field. Early treatments of this process assumed a Mathieu-type resonance and suppression of decay due to the large (relative to the axion mass) electron plasma frequency at the time of onset of axion field oscillation. We explore the validity of these assumptions both analytically and numerically.

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Date submitted: 17 Mar 2006

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