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## Piezoaxionic Detection of Axion Dark Matter with Precessing Nuclear Spins

*jeudi 12 mars 2026 11:50 (20 minutes)*

The piezoaxionic effect enables the conversion of axion-induced nuclear Schiff moments into measurable voltages in piezoelectric crystals. We propose a heterodyne implementation in which controlled nuclear spin dynamics are used to mix the axion oscillation frequency with the nuclear Larmor frequency. This produces sideband signals that allow frequency scanning through the applied magnetic field.

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**Classification de Session:** Dark matter