

# Electronic tuning with dielectrics

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Axion searches above ~1 GHz will employ multiple resonators locked to the same frequency. Fine tuning of individual resonators may be accomplished using thin films of strontium titanate (STO) and related materials, whose dielectric strength can be varied through DC voltage bias. We have developed a method to evaluate these films using coplanar waveguide resonators. We will discuss the assessment of the resonator system and films at room temperature and at cryogenic temperatures.

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