Tuner for the AAA β = 0.175 Spoke Resonator

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A pre-conceptual design of a tuner for the β = 0.175, 2-gap, 350 MHz spoke resonator cavity for the LANL Advanced Accelerator Applications (AAA) Program will be presented. In addition to static adjustments of the cavity RF frequency, the requirements of operation of a waste transmutation facility necessitate that the cavity be rapidly (< 300 msec) detuned to compensate for the effects of a failed cavity or power coupler.