

**Observation and Calculation of Trapped Modes
Near Cut-Off in the ALS Bellows-Shield***,
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Observed heating of the RF shields in the bellows of the ALS storage ring has led to studies of possible causes. One such possibility is resonant impedances near the cut-off frequency of the beam-pipe that arise from small, localized, enlargements of the beampipe cross-section. Calculations of trapped modes in the elliptical-section vacuum chamber, approximated by a rectangular geometry, are described. Measurements of a bellows-shield in the test laboratory, and a comparison with the analytical results, are also described.

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