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**Elastic moduli across the superconducting and pseudogap phase boundaries in four cuprate compounds** BRAD RAMSHAW, ARKADY SHEKHTER, JON BETTS, ALBERT MIGLIORI, Pulsed Field Facility, NHMFL, Los Alamos National Laboratory — A detailed understanding of the physics of the cuprate superconductors relies on an experimental determination of the thermodynamic phase diagram. Resonant ultrasound spectroscopy (RUS) is a unique thermodynamic probe, capable of measuring part per million changes in elastic moduli, and has access to symmetry information. Here we present a symmetry analysis of changes in the elastic moduli across the superconducting and pseudogap phase boundaries in several classes of cuprates: YBCO, LSCO, Hg-1201, and Tl-2201.

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