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Using phonon imaging to measure elastic constants in crystals of low symmetry ADAM SIMPSON, ELIZABETH CARLISLE, TIM HEAD, Abilene Christian University — We attempt to use spatial data from phonon-imaging to identify elastic constants of materials. The current analysis compares continuum limit Monte-Carlo simulations of phonon images to data and attempts to use a minimization process to find the appropriate elastic constants for a material. We are currently working on a proof of concept for Si which has 3 independent elastic constants, but hope to scale up the process to be able to identify the 7 independent elastic constants in CaWO<sub>4</sub>.

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