measure at constant volume the anharmonic shift of phonon energies with temperature, and (3) to measure the quasi-harmonic volume dependencies of phonon energies. In carrying out (3), inelastic neutron scattering studies are planned on crystals grown at a series of pressure points, exploiting thereby the change of density of the solid along the melting line. To achieve an acceptable level of accuracy in a reasonable length of experimental time, it will first be necessary to prepare larger single crystals than the one used in the present work.

A detailed analysis of this experiment and its results will be published later.

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