

Abstract Submitted
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High Pressure Brillouin Scattering in the Fragile Glass Former Cumene¹ TIM RANSOM, WILLIAM OLIVER, University of Arkansas — In recent years full-spectrum analysis in light-scattering has been utilized to explore the liquid-glass transition at variable temperature and ambient pressure. In this study we present temperature- and pressure-dependent Brillouin scattering results for the fragile glass-former cumene. Both equal-angle forward scattering and depolarized backscattering geometries are used, and high pressures are attained by the use of a diamond anvil cell mounted in a custom temperature-controlled housing. Opening up the variable pressure regime to full-spectrum analysis will allow more stringent tests of mode-coupling theory as well as greater insight into the behavior of glass-forming systems.

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