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Simple binary mixtures of hydrogen and ammonia under extreme pressures¹ GUSTAV BORSTAD, Department of Physics, Washington State University and Institute for Shock Physics, CHOONG-SHIK YOO, Department of Chemistry, Washington State University and Institute for Shock Physics — Binary mixtures under pressure are of interest as fundamental systems in physics and chemistry as they allow the effects of the environment on the behavior of different chemical compounds to be examined. Furthermore, mixtures of simple molecular systems are of interest for applications in fuel cells and also to planetary science due to their presence in the interiors of the giant gas planets. In this presentation, Raman data on the ammonia and hydrogen system under pressure will be presented, and the extent and nature of the interactions in this mixture will be discussed.

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