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Experiments on Dense Hydrogen

To cite this article: Ross T. Howie *et al* 2017 *J. Phys.: Conf. Ser.* **950** 022005

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Hydrogen is the lightest, simplest and most abundant element in the universe, and as such the behavior of hydrogen at the most extreme conditions is of vital importance to many fields of science. There has been remarkable progress in high pressure experimental studies of hydrogen over the past 5 years, from the discovery of phase IV^{1,2} and its characterization^{3,4} to the possibility of Anderson localization in dense isotopic mixtures.⁵ In this talk I will present work that will further elucidate properties of the high pressure, high temperature phase diagram of hydrogen.

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Keywords: Hydrogen

