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Studies of pressure changes during cryoprobe extraction from a liquid xenon chamber.[1] ALEC IVERSON, ADAM CRAYCRAFT, DAVID FAIRBANK, STEVE VECCHIO, WILLIAM FAIRBANK, Colorado State University, NEXO COLLABORATION — Barium tagging has been proposed as a method to reduce backgrounds for the planned nEXO experiment, a Majorana neutrino search utilizing ^{136}Xe. We are working on a proposed Ba tagging method that involves extracting the barium on a probe from the liquid xenon time projection chamber. The thermodynamics of a liquid and gaseous xenon system under expansion and compression during and after probe motion is thus of interest and is being investigated. Pressure changes under these conditions have been measured and a model developed.

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