

Studies of Quantum Liquids in Metastable States

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Helium can be prepared with a purity much higher than any other element. As a consequence, it is an ideal material in which to study nucleation processes. We will describe work in which liquid helium has been studied at pressures both above and below the pressure range in which the liquid is the thermodynamically stable phase. This has made possible the study of a wide range of interesting phenomena including the quantum nucleation of bubbles and the imaging of the motion of single electrons moving through the liquid.