

TWO-COMPONENT BOSE GASES AT ULTRA-COLD TEMPERATURE**Atika MEHEDI**

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Abstract

Binary mixtures and especially mixtures of cold molecules is by now a challenging field of research both theoretical, numerical and experimental. In this preliminary work, we construct a variational approximation scheme to derive the mean- field dynamical equations for mixtures of atoms and molecules at low temperature. The anomalous averages and the non condensate densities for a 1D homogeneous bose mixture at zero temperature are computed numerically.