

Figure 1.8: Free energy density f of a binary fluid as a function of the volume fraction  $\phi$  of droplet material for different normalized temperatures  $\theta = k_{\rm B}T/(\nu\chi)$ . (A) The free energy density  $f(\phi)$  is shown. (B) The chemical potential  $\mu(\phi) \propto \partial_{\phi} f(\phi)$  is shown. The minima (blue dots) and inflection points (orange hexagons) of  $f(\phi)$  are indicated in both panels.