

Figure 1: Atomic density $n(z)$ and trapping potential $V(z)$ at zero temperature in the c-field simulations. Slices taken along the z -direction at $x = 0$, $y = 50 \mu\text{m}$ (i.e. in the centre of the ring). Energy and length are expressed in units of the chemical potential μ and the healing length $\xi = \hbar/(m\mu)^{1/2}$, respectively.

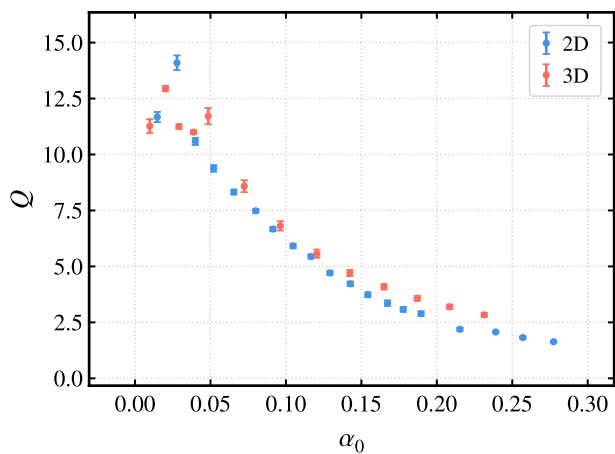


Figure 2: Comparison of Q -factors between 2D and 3D c-field simulations for an $m^* = 5$ imprint. The condensate fraction is $n_0 \approx 0.75$.