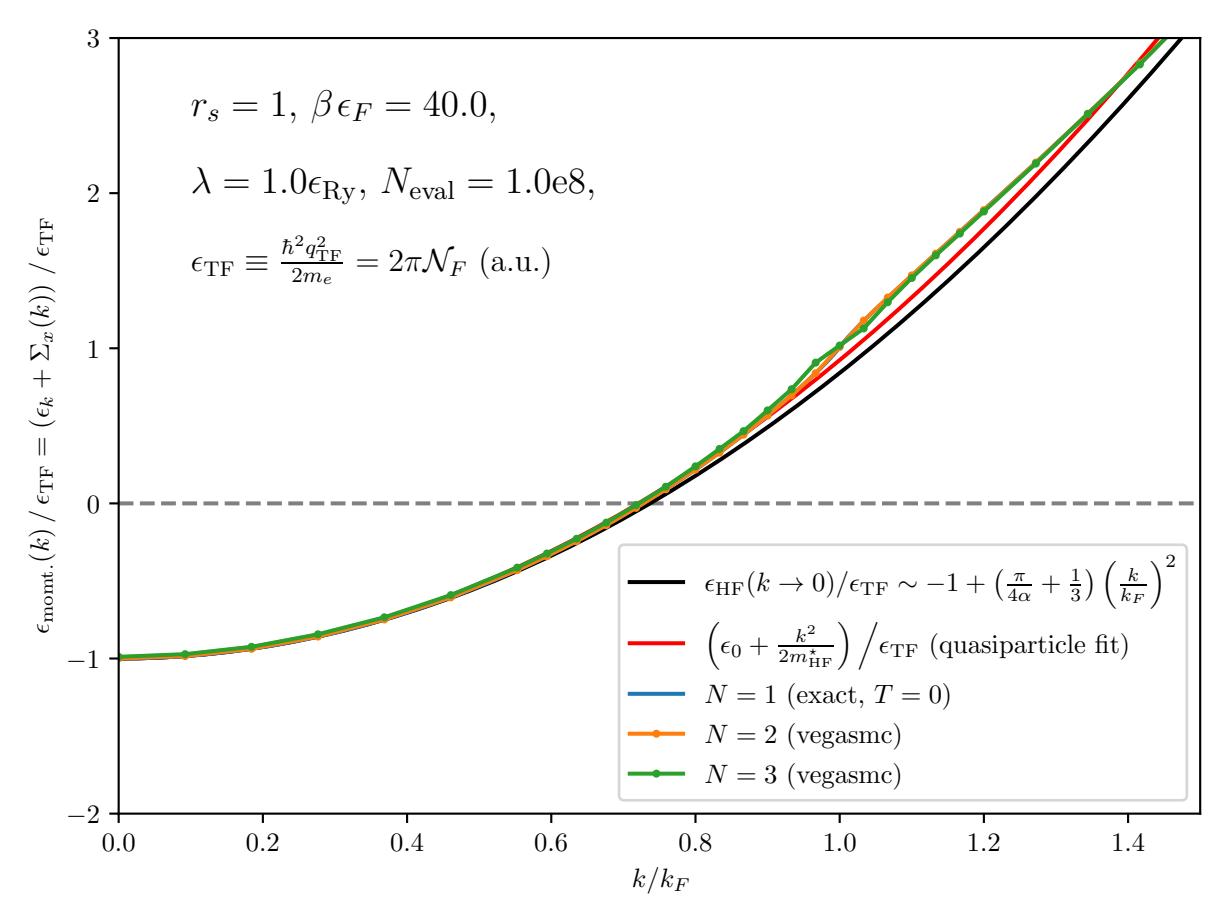
$r_s = 1,\ \beta\epsilon_F = 40.0,$
$\lambda = 1.0\epsilon_{\mathrm{Ry}},\ N_{\mathrm{eval}} = 1.0\mathrm{e}8,$
$\epsilon_{\mathrm{TF}} \equiv \frac{\hbar^2 q_{\mathrm{TF}}^2}{2m_e} = 2\pi\mathcal{N}_F$ (a.u.)
$\epsilon_{\mathrm{HF}}(k\to 0)/\epsilon_{\mathrm{TF}} \sim -1 + \left(\frac{\pi}{4\alpha} + \frac{1}{3}\right)\left(\frac{k}{k_F}\right)^2$
$\left(\epsilon_0 + \frac{k^2}{2m^\star_{\mathrm{HF}}}\right) \Big/ \epsilon_{\mathrm{TF}}$ (quasiparticle fit)
$N = 1$ (exact, $T = 0$)
$N = 2$ (vegasmc)
$N = 3$ (vegasmc)
$\epsilon_{\mathrm{mont.}}(k)\ /\ \epsilon_{\mathrm{TF}} = (\epsilon_k + \Sigma_x(k))\ /\ \epsilon_{\mathrm{TF}}$
k/k_F
3
2
1
0
−1
−2
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4