

$mg = 0.5$, $U = 1.7$, $\mu = -0.5$, N

$T/T_c = 8.459314332920282e-08$
 $T/T_c = 0.5$
 $T/T_c = 0.95$
 $T/T_c = 0.98$
 $T/T_c = 1.0$

