$N_{re}=4$, $S=10$, $p=2$, $c=0.1$, $N_c=100$
$d_{\text{attract}}=0.1$, $w_{\text{attract}}=0.2$, $h_{\text{repellant}}=0.1$, $w_{\text{repellant}}=10$

$J^*=1.3\text{e-}05$