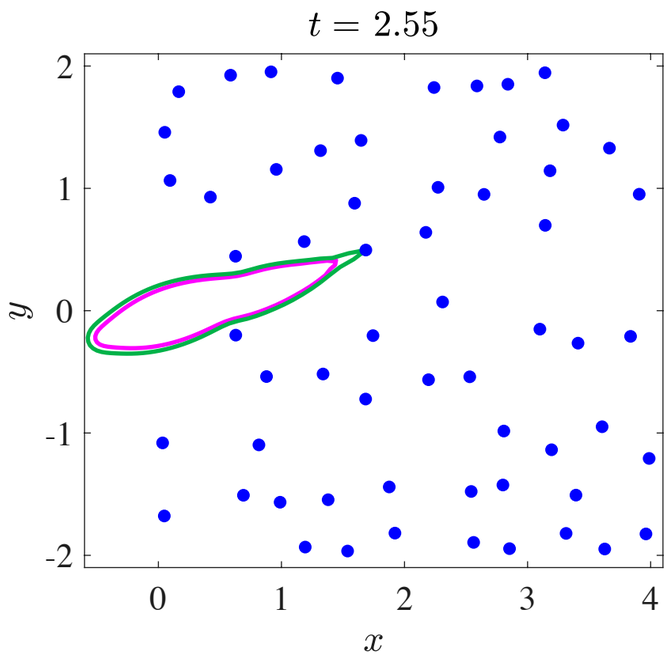
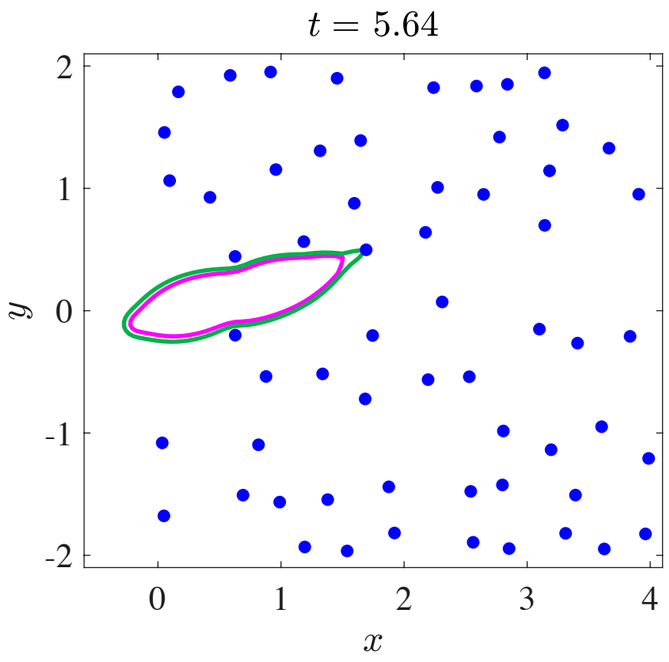
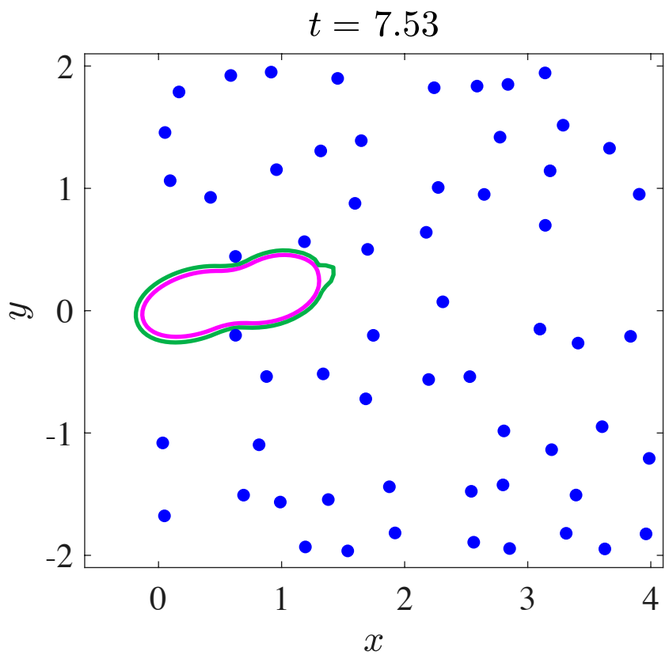
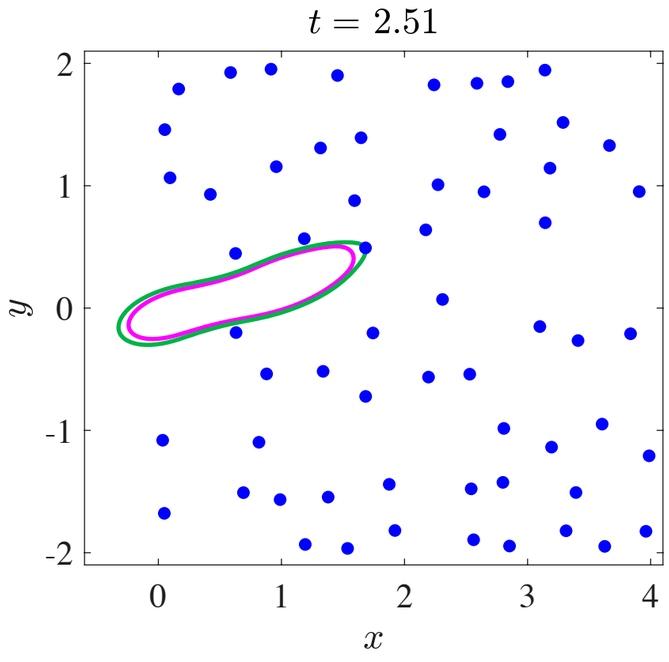
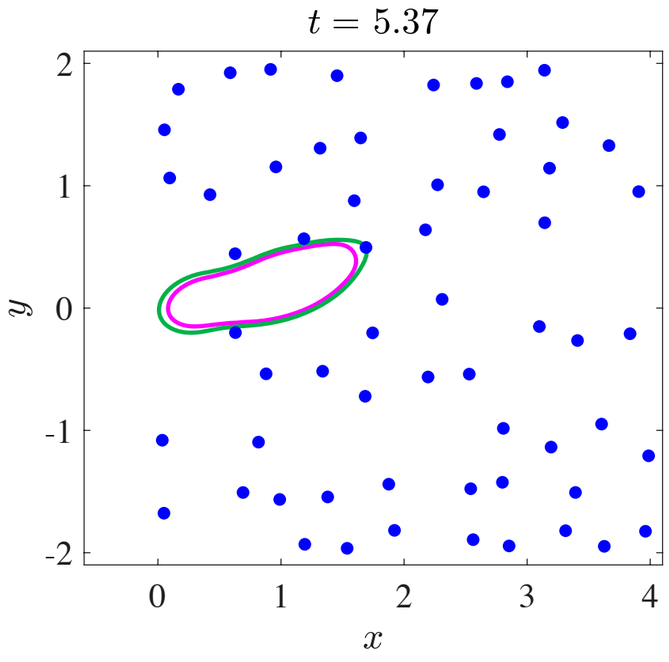
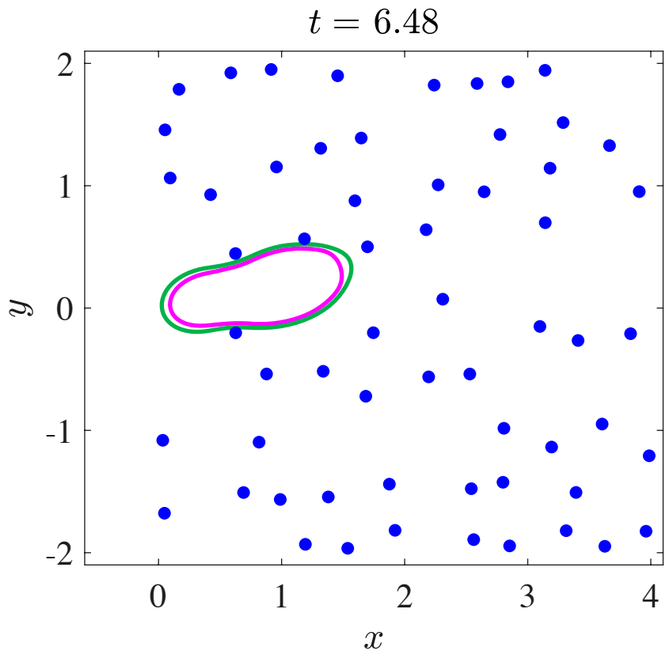
(a) $K_b = 0$







(b) $K_b = 0.05$