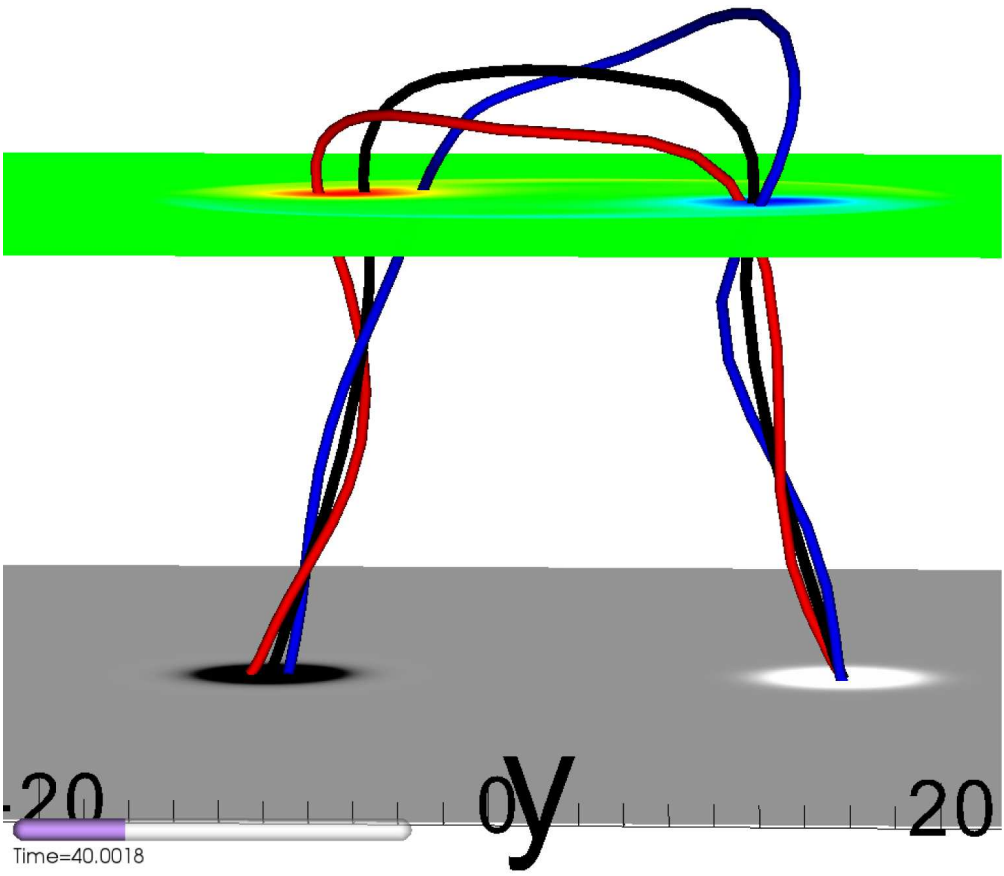
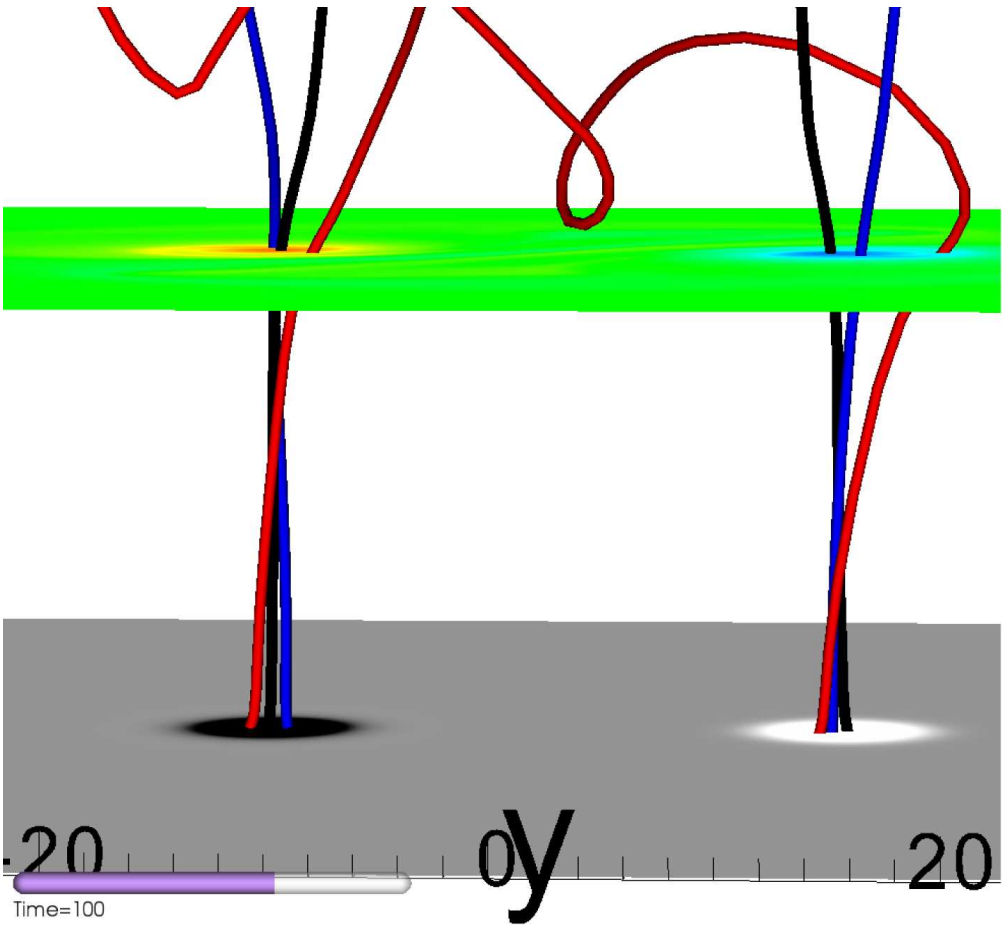


(a) $t = 40$



(b) $t = 100$