

MC steps = 10000
tmax = 100.0 ps
 $\tau = 10.0$ ps
 $r_0 = (14.0, 9.0) \pm 0.8 \mu\text{m}$
 $v_0 = 3.0 \pm 0.1 \mu\text{m/ps}$
diffusion = ± 1.57 rads

