

MC steps = 1000  
tmax = 100.0 ps  
 $\tau = 10.0$  ps  
 $r_0 = (5.0, 5.0) \pm 0.8 \mu\text{m}$   
 $v_0 = 2.0 \pm 0.1 \mu\text{m/ps}$   
diffusion =  $\pm 0.79$  rads

