

② Get simulated D in (b) video

$$D = \sqrt{\frac{K(r(t+\tau) - r(t))^2}{2d^2}}$$

from simulation
Input a from q. given $(N, \text{rel } \tau, t)$

③ if $N = 50 \rightarrow D = 4.1548 \times 10^{-13} \pm 1.8652 \times 10^{-14}$

we just substitute the N obtained from (1)

④

AS	N	10	100	1000
uncertainty		1.9166×10^{-15}	1.3308×10^{-15}	1.2308×10^{-16}
			3.085×10^{-16}	

for the same d ,
as N increase \therefore uncertainty increase

Additional sources of error: measurement & systematic instrumentation (bulk flow)