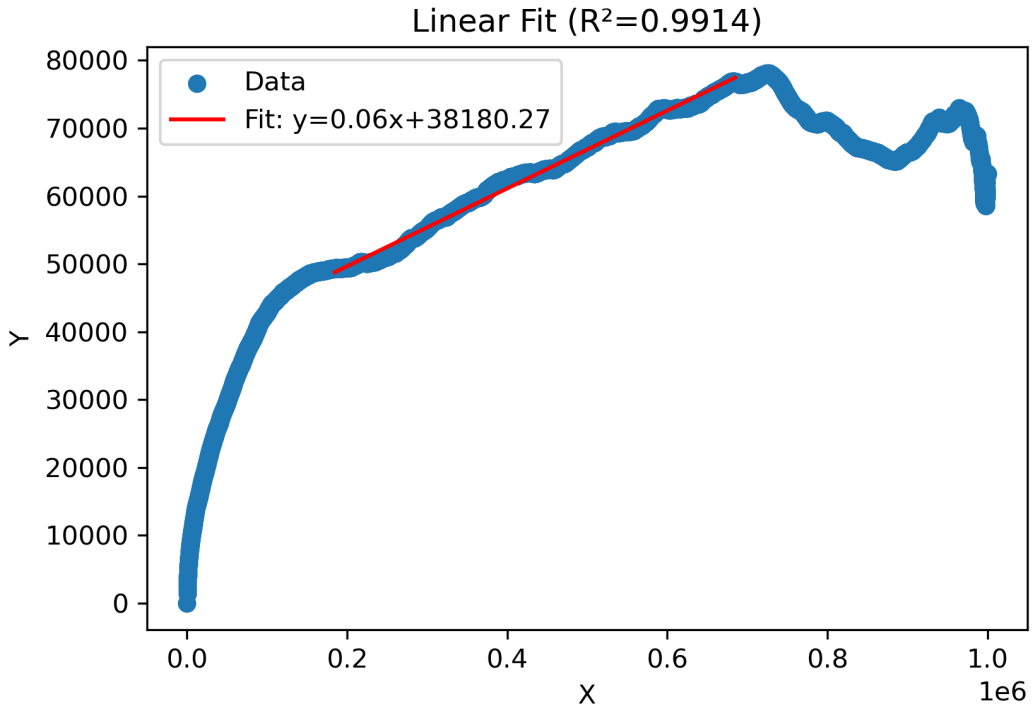

Figure 1: MSD DB1 LinearFit

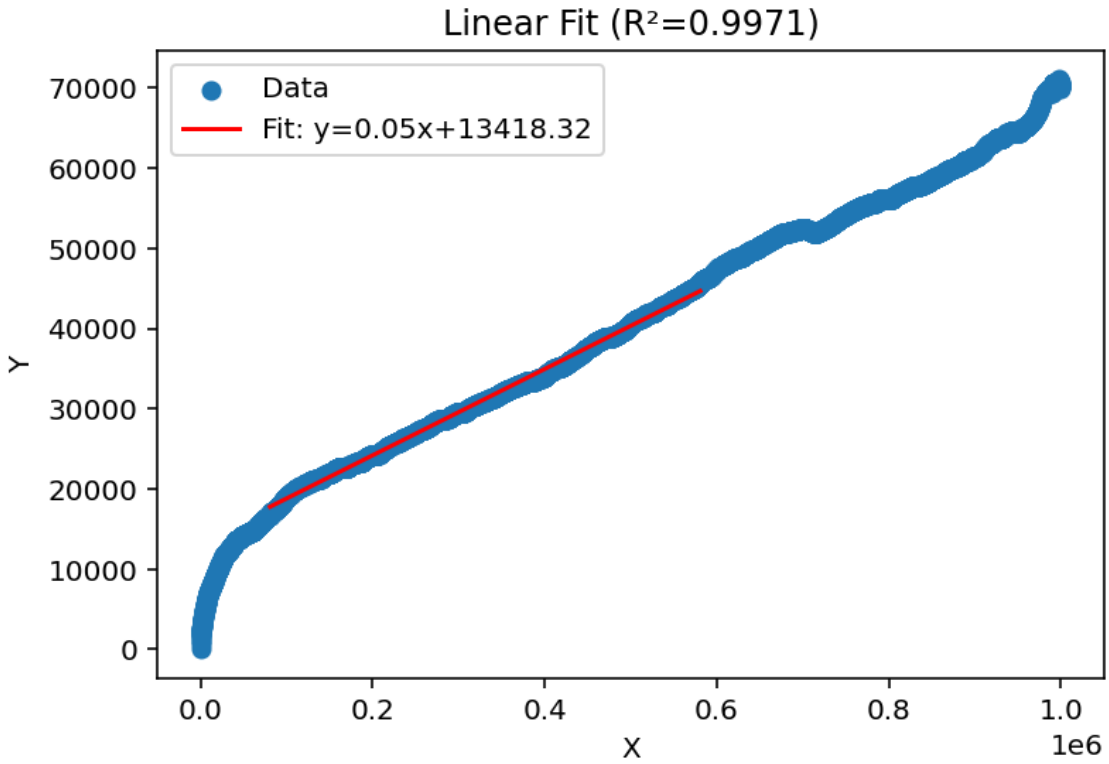

Figure 2: MSD DB2 LinearFit

$$\frac{r_{real}^{DB}}{r_{sim}^{DB}} = \frac{2.25 \cdot 10^{-6} m}{4 u_L} = 5.63 \cdot 10^{-7} m/u_L \tag{1}$$

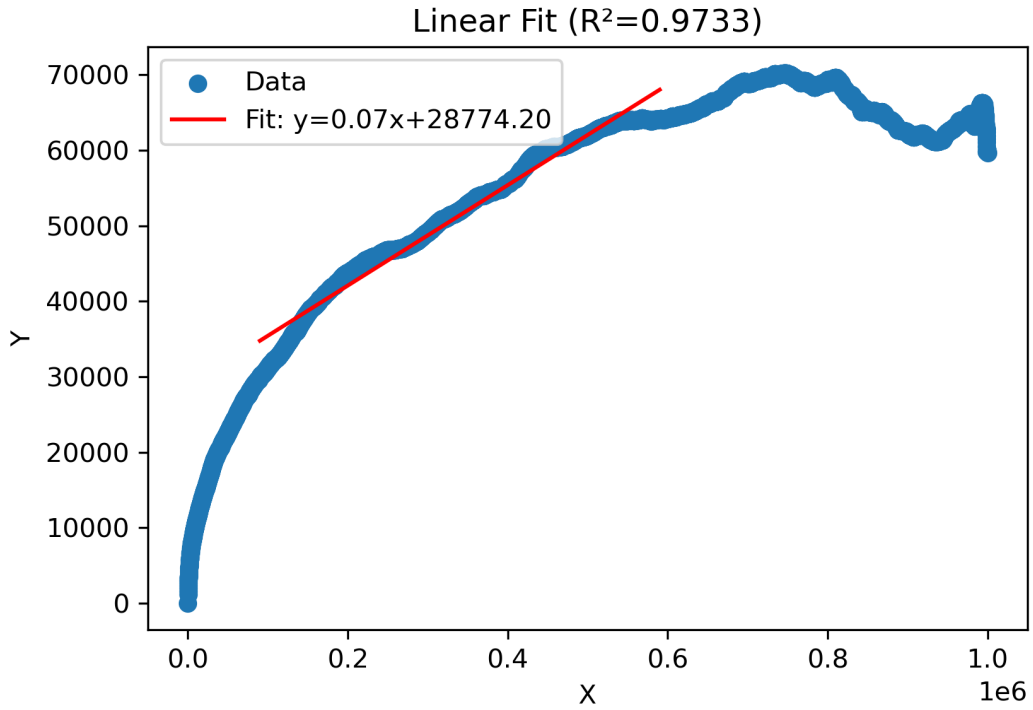

Figure 3: MSD DB3 LinearFit

where u_L are length simulation units.

$$D = \frac{k_B T}{6\pi\eta r} \tag{2}$$

$T = 298K$, $\eta_{RPMI} = 7 \cdot 10^{-4} Ns/m$, $r_{DB} = 2,25 \cdot 10^{-6} m$

$$D_T = 1,39 \cdot 10^{-13} m^2/s \tag{3}$$

Simulation	MCS	MinPoints	Start idx	End idx	Slope $(pixel^2/MCS)$	Intersection	R^2
1	$1 \cdot 10^6$	$5 \cdot 10^3$	1848	6848	0.057364563	38180.26896	0.991
2	$1 \cdot 10^6$	$5 \cdot 10^3$	809	5809	0.053814176	13418.32429	0.997
3	$1 \cdot 10^6$	$3 \cdot 10^3$	1737	4737	0.064802648	30278, 10412	0.992

Simulation	D_{sim} (u_L^2/MCS)	D_{sim} (m^2/MCS)	τ (s/MCS)
1	0.014341141	$4.15 \cdot 10^{-15}$	$3.27 \cdot 10^{-2}$
2	0.013453544	$4.26 \cdot 10^{-15}$	$3.07 \cdot 10^{-2}$
3	0.016200662	$5.13 \cdot 10^{-15}$	$3.70 \cdot 10^{-2}$