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**Supplemental Information**

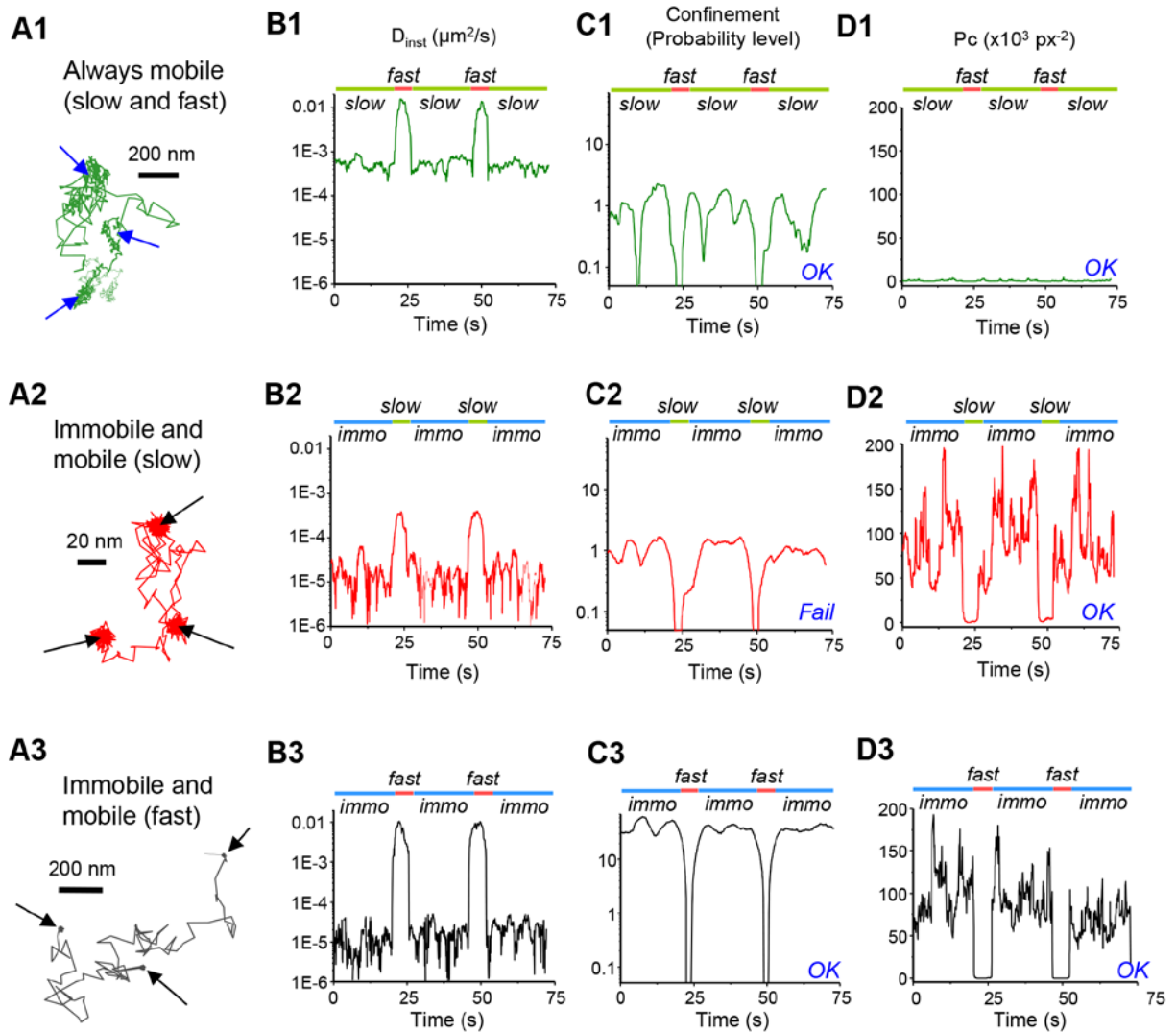
**A Simple and Powerful Analysis of Lateral Subdiffusion Using Single Particle Tracking**

**Marianne Renner, Lili Wang, Sabine Levi, Laetitia Hennekinne, and Antoine Triller**

## Supporting Material

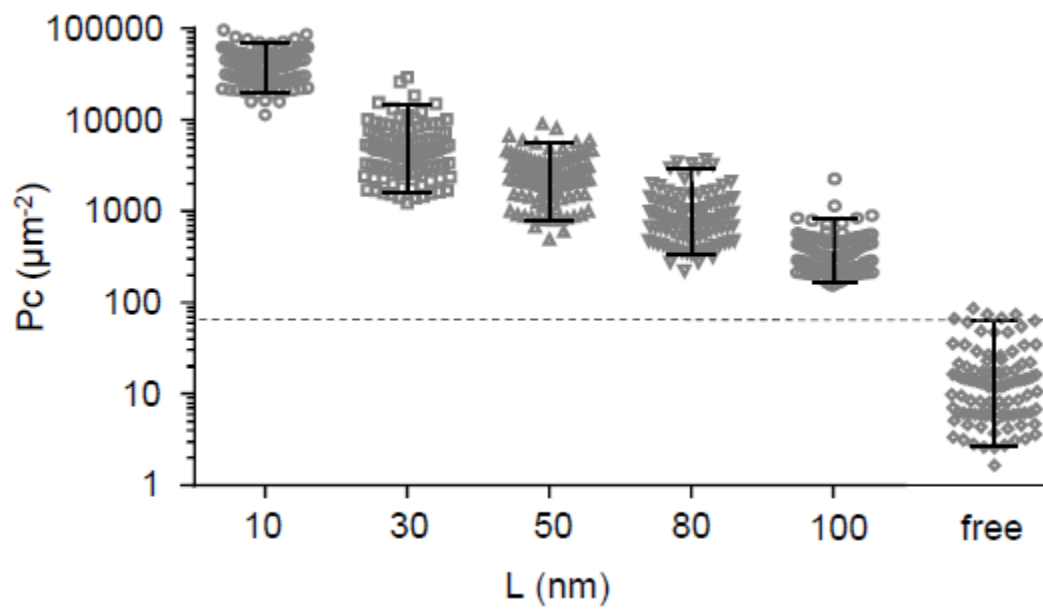
### A simple and powerful analysis of lateral subdiffusion using single particle tracking

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**Fig. S1: Comparison between  $P_c$  and the confinement probability level.**

(A) Trajectories were simulated with three periods of slow diffusion (A1) or immobility (arrows, B1 and C1) separated by periods of free fast (A1 and A3) or slow (A2) diffusion. (B) Instantaneous  $D$  calculated on a sliding window of 30 time points for the trajectories in A. The periods with different diffusivity are indicated on top. (C) Confinement level calculated as in [18]. Note that trajectories A1 and A2 had the same distribution of values despite the immobility periods of trajectory A2. (D)  $P_c$  values correctly increased when immobility was present.



**Fig. S2: Distribution of  $P_c$  values on random walk or confined trajectories.** 30 time points-long simulated trajectories confined in areas of the indicated sizes ( $L$ ) or not confined (free) (bars: P5 and P95 of the distribution,  $n=100$  trajectories in each case). Simulations were done taking into account a localization accuracy of 10 nm. The horizontal broken line corresponds to the P95 value of  $P_c$  distribution of random walk trajectories ( $67 \mu\text{m}^{-2}$ ).