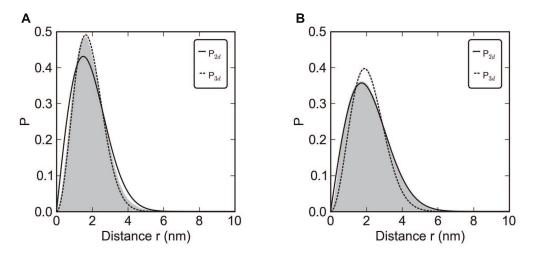
## Supporting Information: Figure S6



Displacement distributions for CE (Panel A) and POPC (Panel B) together with the fits of  $P_{2d}$  and  $P_{3d}$ . For CE,  $P_{3d}$  fits the data substantially better than the 2D description, while for POPC,  $P_{2d}$  describes the data significantly better compared to the 3D realization. The time interval used in the analysis was 82 ns for both distributions (A,B).