

Description of Additional Supplementary Files

File Name: Supplementary Movie 1

Description: Simulated 3D PSF datasets at increasing emitter densities (ρ_{loc}).

File Name: Supplementary Movie 2

Description: Comparison of simulated and experimental SMLFM data.

File Name: Supplementary Movie 3

Description: B-cell raw localization data and 3D reconstruction.

File Name: Supplementary Movie 4

Description: 3D reconstruction of BCR diffusion across a live cell membrane.