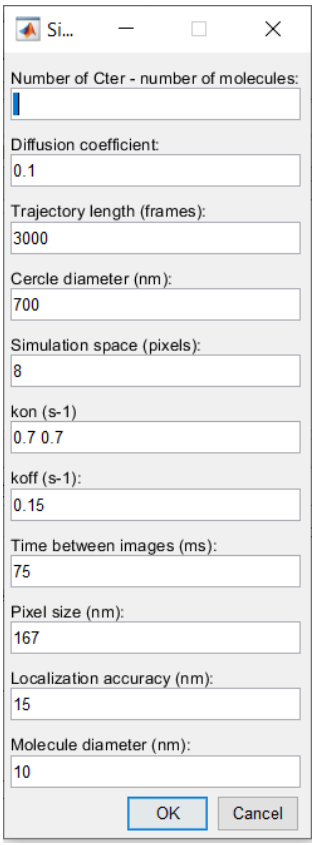
DiffuTrapKv2 help

Enter the parameters in the pop up window:



Number of Cter – number of molecules:

Enter the number of subunits bearing the entire Cter (with a PRC domain) and the number of molecules with these characteristics (two numbers, separated by a space):

Example: 2 100 -> means a simulation with 100 molecules (tetramers) with 2 PRC domains.

If you combine two groups, enter the values for one after the other:

Example: 2 100 4 100

Diffusion coefficient:

In µm2/s (mean value of a gaussian distribution of D).

Trajectory length:

Duration of the simulation, in "SPT" frames.

Circle diameter:

Circular space, in the middle of the simulation space, where interactions may occur.

Simulation space: Size of the bounding box where molecules diffuse.

Kon and koff: Effective constants for the scaffolding interaction (each PRC acting independently).

Time between images, Pixel size, Localization accuracy: The same than the SPT experiment that the simulation wants to reproduce.

Molecule diameter: Size of the diffusing molecule (circle).

<u>Output :</u>

- Trajectory files (.trc, a txt file), in \trc folder. One file per group, with:

molecule #	image #	x position	y position	....
1.0000000e+000	1.0000000e+000	1.5381968e+002	1.5974734e+002	1.9923065e-001
1.0000000e+000	2.0000000e+000	1.5390920e+002	1.5970688e+002	1.9902105e-001
1.0000000e+000	3.0000000e+000	1.5404362e+002	1.5970862e+002	1.9931722e-001
1.0000000e+000	4.0000000e+000	1.5398947e+002	1.5976557e+002	1.9925981e-001
1.0000000e+000	5.0000000e+000	1.5407786e+002	1.5973974e+002	1.9938376e-001
1.0000000e+000	6.0000000e+000	1.5401896e+002	1.5974573e+002	1.9800292e-001
1.0000000e+000	7.0000000e+000	1.5425990e+002	1.5977814e+002	1.9771094e-001
1.0000000e+000	8.0000000e+000	1.5450888e+002	1.5968371e+002	1.9281971e-001
2.0000000e+000	1.0000000e+000	1.3310520e+002	6.1945936e+001	1.9910794e-001
2.0000000e+000	2.0000000e+000	1.3321505e+002	6.1895810e+001	1.9945456e-001
2.0000000e+000	3.0000000e+000	1.3320545e+002	6.1871880e+001	1.9905264e-001
2.0000000e+000	4.0000000e+000	1.3326024e+002	6.1989354e+001	1.9899402e-001

- A report file with the parameters (main folder)