

Process Description:

Motion Analysis takes in tracks performs diffusion analysis and classifies them according to their motion type. For a full description of the algorithm, see **Jaqaman et al. Cytoskeletal control of CD36 diffusion promotes its receptor and signaling function Cell 146: 593 – 606. (2011).**

Input Channels:

Select the channels containing valid tracks on which you want to perform motion analyse

Parameters:

Problem Dimensionality: Choose 2 or 3 from the drop-down menu.

Check “**Analyze asymmetric tracks**” to check for asymmetric tracks and analyze their diffusion after dimensionality reduction

Alpha value for asymmetry determination:

Alpha value for moment scaling spectrum (MSS) analysis:

Choose a **Method for calculating the confinement radius** using the drop-down menu. Currently available methods are:

- Use the minimum positional standard deviation
- Use the mean positional standard deviation
- Approximate the confinement area by a rectangle