Spots Close To Filaments Instructions

To run this XTension the user has to create a Spots and a Filaments component. This XTension splits one Spots object into two Spots objects.

All previously defined Spots objects are classified based on their spatial proximity with the Filament object.

One Spots object includes all the spots that are close to the filamentous structure (colored red). The other Spots object includes the spots that are located outside of the defined distance from the reference filaments (colored blue).

To account for significantly different filament diameters a ratio instead of an absolute distance between spots and filaments is used:

The ratio is given by r=a/b

a- Distance between the spot location and the centre of the filament

b- Filament radius