

## Process Description:

“Detection” takes in the image sequence(s) of interest, identifies the objects in each image, and returns information such as object positions and intensities.

### *Detection Method:*

From the drop-down menu, choose which detection method you would like to use.

Current options:

**“Gaussian Mixture-Model Fitting”**: Use this algorithm to detect sub-resolution objects in 2D, e.g. single molecules or small molecular aggregates that are smaller than the diffraction limit (i.e.  $< 200$  nm). The algorithm returns object coordinates, with sub-pixel localization, and object intensities. Click on help button associated with GUI for setting up the parameters for more information.

Currently this is the only option, but we plan to add more options in future releases.