## Process Description:

The calibration of a valid noise model is critical for the statistical detection of speckles. From a cropped stack of background, the calibration step computes the mean and the standard deviation of the background intensity. To validate the Gaussian noise assumption, the noise model calibration calculates an additional value called Gauss ratio.

## Parameter Descriptions:

### Input Channels:

This allows you to select which channels to use to calibrate noise models. This should be applied to all channels where speckles will be detected. Select the channels by clicking on them in the "Available Input Channels" box and then clicking "Select>" to move them to the "Selected Channels" box. You can unselect a channel by clicking the "Delete" button

### Select Window of Interest

This allows the user to select a region of background in the movie. A pop-up window should open showing the current channel and the frame. Adjust the rectangular Region of Interest (ROI) to select a region containing only background. Use the frame slider to make sure no parts of a cell move into the ROI during the movie.

### First/last stack image

This allows the user to select a frame range for cropping the background stack.

## References

Ponti, A., P. Vallotton, et al. (2003). "Computational analysis of F-actin turnover in cortical actin meshworks using fluorescent speckle microscopy." Biophys J 84(5): 3336-3352.