Movie viewer:

This interface allows to visualize the content of a movie (or movie list) including all its analysis results. The interface is dynamically generated from the movie.

Movie panel:

The first element of the top panel should display the current component and its relative path. If the input is a movie list, a drop-down menu allows switching between the various components of the list.

Additionally, if the current component is a movie,

- the current frame can be controlled by the **Frame** slider.
- the **Run movie** button, if clicked, will trigger a loop through the movie frames starting from the current frame. If **Save frames** is checked, each single frame with all its overlays will be saved as a TIFF file. If **Save movie** is checked, the frames will be assembled and saved as a movie file on the disk. The format for the movie file can be chosen from the drop-down menu.

Images:

This panel lists all the images that can be drawn in the movie figure. Right below the list of images, some options give some additional control over the image display:

Colorbar:
This allows the user to add a colorbar to the movie figure. The location of the colorbar can be chosen from the drop-down menu next to the checkbox.

Colormap:
In the case of single channel images, this allows to choose the colormap to display the image. Note this choice will have no effect if displaying more than one channel.

Color limits:
For indexed (single-channel) images, this allows to specify the limits of the colormap.

Scaling factor:
This allows you to specify a factor for scaling the indexed image. This option is for display purposes only, i.e. it does not modify the underlying data. Default is 1 and displays the unscaled data.

Scalebar:
If the pixel size of the movie has been entered, this allows to overlay a scalebar on the movie figure. The location of the scalebar can be selected from the drop-down menu next to the checkbox. You can specify the length (in microns) of the scalebar to add and display or not the length of the scalebar underneath it.

Overlays:

This panel lists all the analysis results that can be overlaid on top of the image (masks, objects, tracks…). Check the corresponding checkbox to overlay the selected component.
Overlay-specific options are listed below the list of results:

Window options:
If windows are displayed, you can set the transparency of the drawn polygons by adjusting the **Alpha value**. Alpha values must be between 0 and 1.

Track options:
If tracks are drawn, you can also display the track numbers by checking **Show label** and adjust the length of the dragtail for all the tracks by changing the value of **Dragtail length** (between 2 and Inf).

Vector field options:
If a vector field is overlaid on top of the image, you can control several parameters:

Scale factor is a multiplicative constant applied to all the vector displacements before display. Default is 1 meaning the vectors are displayed unscaled.

If both the pixel size and the time interval (frame rate) of the movie have been entered, **Scalebar** allows you to draw a scalebar showing the velocity of the vector fields. The drop-down menu on the left allows to control the position of the scalebar, the edit field allows to specify the length in nm/min of the scalebar and the **Show label** checkbox allows to add a text displaying the velocity of the scalebar.

For color-coded vector fields, the c**olor limits** boxes allows the user to control the bounds of the vector norms for display. All vectors of norm less or equal to the lower limit will be displayed using the first color of the colormap while all vectors of norm greater or equal to the upper bound will be displayed using the last color of the colormap.

Graphs:

This panel lists analysis results that are not overlaid onto the initial movie. Most of these results are plots or histograms and will open a new figure when selected.

Scalar Map Options:
If maps are drawn (e.g. activity or protrusion maps), they can be smoothed using cubic spline interpolation. To smooth a map, set the **Upsampling Factor** to an integer value greater than 1 and adjust the **Smoothing Parameter** between 0 and 1 where 0 is the smoothest and 1 is the least smoothing.