## RasterPlot.m Manual

Automated raster, peri-event time, histogram and functional cell calculations.

- ‡ Dependency: dataread.m
- ‡ Recommended dataset: Events and cell images.

Stand-alone usage:

Run >> RasterPlot(sampling rate, start time, end time, first cell, last cell) % Time in seconds. Cells must be in columnar order in the excel or text file. Example: i. RasterPlot(5,200,600,2,100,5);

## **GUI Usage:**

## Click RasterPlot.m and desired dataset then RUN

- I. Select [Events] or [Events + Transients] (Transients will be used on the original plot only).
- II. Locate the dataset(s). Transients are first if user preferred both data. (Pre-located in GUI)
- III. Events will be used on peri-event and histogram calculations. (Transients will be used on the original plot only).
- IV. User will be asked for image deposition (Y/N). If yes:
- i. Locate a single image file; e.g. 'ic.tif'
- ii. Program requires non-integer ending on the file path. Thus, user
  has to confirm the entered image path is correct. For example
  ('ic2.tif'→ Correct as 'ic')
- V. Illustration of (Original data in cell by time sorting, peri-event, ∑event histogram with respect to entered bin width and functional cell map.

‡ Color code for the functional cell map will be equivalent of #of events/cell for the given time course (start - end time).