This document contains notes regarding running the experiment from the following paper:

Before you start
Make sure to have Psychtoolbox-3 (http://psychtoolbox.org/HomePage) installed before running code. The experiment will *only run on a single-monitor setup*, and we recommend using a monitor with a 60Hz refresh rate to get the display timing correct. Make sure that your current path is in or includes the "experiment" folder.

Experiment Functions:
run_orientation_expt()
- Run a session of the orientation change detection experiment. This consists of 600 trials drawn from the generative model shown in the supplementary figures.

run_color_expt()
- Run a session of the color change detection experiment. This consists of 600 trials drawn from the generative model shown in the supplementary figures. This is practically identical to the orientation experiment code, except circular color patches are shown instead of oriented ellipses.

[settings] = getExperimentSettings()
- Helper function to set the settings for the experiment code. It takes in the subject initials, and could be modified to generate experimental trials in a pseudorandom (rather than random according to the generative model) way.

[im] = drawEllipse(d1,d2,rot,fgcol,bgcol)
- Output an ellipse with axes length d1 and d2, rotation rot. fgcol is the foreground color, bgcol is the background color. im is a double matrix.