LLAMAS for Len's Study

Located in the add_functions branch of Josh's GitHub: https://github.com/jalevitt/EEG-LLAMAS/tree/add_functions. Ask Josh to add you as a collaborator.

Added files:

Postprocessing functions:

- PlotSpectrogram: plots a spectrogram every ten minutes
- PlotDelpAndMovs: plots delp, movs and mags every ten minutes
- StimTracker: updates the number of stims sent every 3 minutes in a GUI
- AwakeSlowWavePhasePredict.m: plays stims every second for an awake participant; includes a block design if desired (though I do not think this will be used much again

Other things added:

- SetValues.mlapp: place to set values such as delp, movs, and confidence thresholds prior to LLAMAS running. If you desire a block design and/or stims to only be sent a certain percentage of the time, these can be set here as well.
- A button was added to the LLAMAS.mlapp designer to lead to SetValues.mlapp.

Issue to Resolve:

- For StimTracker.m, a GUI is saved that makes loading the data after the experiment slow. It would be great if this was resolved.

Key differences between Len's and Josh's LLAMAS code in SlowWavePhasePredict.m and SlowWaveBaseline.m:

- Different fpz and c4 predictors
- delp, movs, and mags (confthreshold) are set with a GUI for Len
- 2.5 seconds between each stim for Len(compared to 2 seconds for josh)
- Differences in the bandpass filter for slow wave
- Len re-references EEG data to the mastoid
- Block design built into the script for phase prediction for Len
- Baseline code does not send any stims, but only stores mags, delp and movs values for Len