

The data for the Needle Insertion Experiment is a file containing a MATLAB structure arranged in the following way:

Experiment.type %the type of the experiment '1', '2' or '3'

Experiment.Subjects %array of structures containing data for each subject

Experiment.Subjects(i).name %name of  $i^{\text{th}}$  subject

Experiment.Subjects(i).Trial %an array of structures containing data from each trial

Experiment.Subjects(i).Trial(j).Position % position [m]

Experiment.Subjects(i).Trial(j).Force % force [N]

Experiment.Subjects(i).Trial(j).Time % time [sec]

Experiment.Subjects(i).Trial(j).Start % 1<sup>st</sup> boundary location [N/m]

Experiment.Subjects(i).Trial(j).Boundary % 2<sup>nd</sup> boundary location [mm]

Experiment.Subjects(i).Trial(j).delT1 %  $\Delta t_1$  [sec]

Experiment.Subjects(i).Trial(j).delT2 %  $\Delta t_2$  [sec]

Experiment.Subjects(i).Trial(j).Gx % Gain Position

Experiment.Subjects(i).Trial(j).Gf % Gain Force

Experiment.Subjects(i).Trial(j).kb1 % 1<sup>st</sup> stiffness coefficient [N/mm]

Experiment.Subjects(i).Trial(j).kb2 % 2<sup>nd</sup> stiffness coefficient [N/mm<sup>2</sup>]

Experiment.Subjects(i).Trial(j).kt % stiffness coefficient after 2<sup>nd</sup> boundary [N/m]

Experiment.Subjects(i).Trial(j).answer % feedback after trial, either "yes" or "no"

Experiment.Subjects(i).Trial(j).answer % the answer of the subject for the  $j^{\text{th}}$  trial, either "none", "previous" or "current", depending if the trial was a catch trial.