MATLAB Window Help Fri Apr 22 2:01 AM

MATLAB R2020a - academic use

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final project ct2.m (Script)

Editor - /Applications/trialproject.m

determinePhaseDiff.m | trialproject.m | untitled5*

```
x = table2array(trialchannel1(:,2));
y = table2array(trialchannel2(:,2));
x = x - mean(x);
y = y - mean(y);
x = smoothdata(x);
y = smoothdata(y);
plot(x,'r');
hold;
plot(y,'b');
[~,locks] = findpeaks(x);
[~,locks2] = findpeaks(y);
D2 = locks(2) - locks2(2);
D1 = locks(3) - locks(2);
Angle = ( D2 / D1 ) * 360 ;
if D2 < 0
    Angle = Angle + 360;
end
fprintf('Phase angle difference is %.3f%c',Angle,char(176));
```

Command Window

```
>> trialproject
Current plot held
Phase angle difference is 69.480°>>
```

Workspace

Name	Value
Angle	69.4800
D1	2000
D2	-1614
locks	[596;2596;4596;...
locks2	[2211;4210;6210]
trialchannel1	*8192x2 table*
trialchannel2	*8192x2 table*
x	*8192x1 double*
y	*8192x1 double*

UTF-8 script Ln 14 Col 25