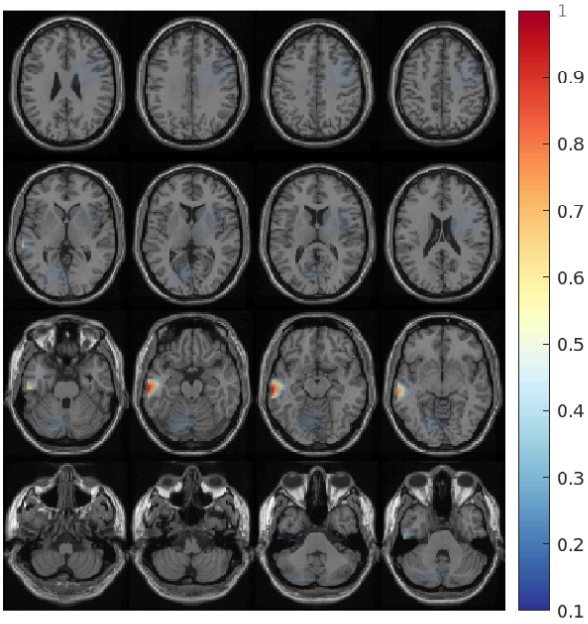
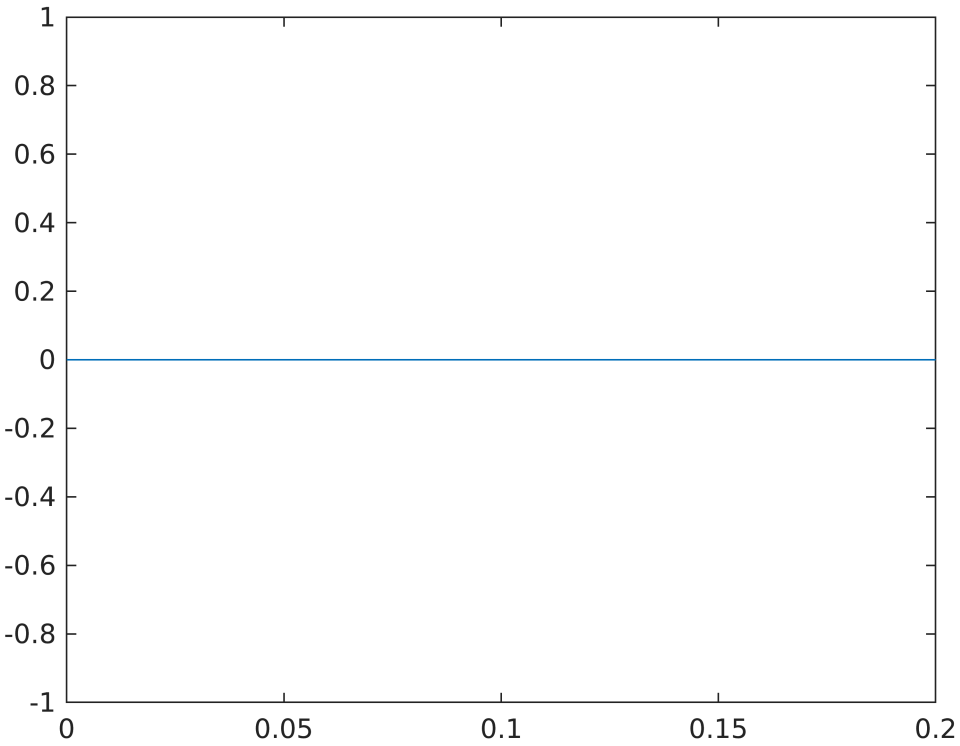
This is a test

$C_r = 5$



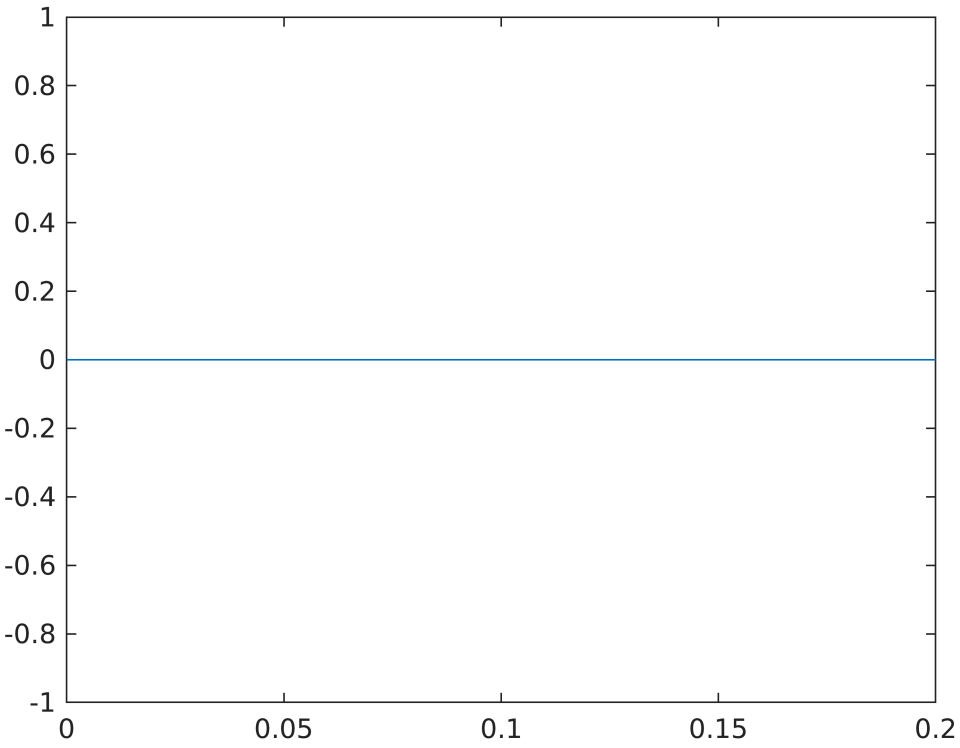
setup the parametrs

```
dt = 0.1;
T = 0:dt:0.20; % second
H = zeros(1,length(T)); % meters

figure, plot(T,H)
```



Simulation of trajectory

```
dt = 0.1;
T = 0:dt:0.20; % second
H = zeros(1,length(T)); % meters

figure, plot(T,H)
```


1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
0.05
0.1
0.15
0.2