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2/3/17

Bioimaging

BB04 Homework

The script used to create the first row of graphs is below, the figure of the graph is below that. On the lower graph, h(t) is in blue, and the convolution is in orange.

t = (-10:.001:10);

%input function

xt(t<0) = 0;

xt(t>=0) = .5;

xt(t>2) = 0;

%h(t) function

ht = exp(-t).\*heaviside(t);

plot(t,ht);

%either this or the commented code below does the same

%job, I was just trying to find the best way to do it.

%h = exp(-t);

%ht(t<0) = 0;

%ht(t>=0) = h(t>=0);

%y(t) convolution function

yt = conv(ht,xt/sum(xt),'same');

subplot(2,1,1);

plot(t,xt);

subplot(2,1,2);

plot(t,ht,t,yt);

