

Physics 39L - Homework 6

Following the lecture notes (see "Convolution integral in pictures; notes of DK"), evaluate in pictures and analytically the convolution of the input

$$F(t) = \begin{cases} 0 & t < 0 \\ 1 & 0 \leq t \leq a \\ 0 & t > 0 \end{cases}$$

and the response

$$h(t) = \begin{cases} 0 & t < 0 \\ \frac{t}{\tau^2} e^{-t/\tau} & t \geq 0 \end{cases}.$$