

Define

$$\psi_{\mu,\sigma}(t) = \left(1 - \left(\frac{t-\mu}{\sigma}\right)^2\right) e^{\frac{-(t-\mu)^2}{2\sigma^2}}$$

Yiran's test case is

$$\psi(t) = \frac{1}{2}(\psi_{1,0.1}(t) + \psi_{3,0.1}(t))$$

The  $\sigma = 0.1$  is a guess based on eyeballing her plot. The plot on the right is her plot. The plot on the right is mine. See if you can recreate this plot to see what yours looks like. My  $L_2^2$  curve looks correct (I just don't have as many points). But the  $W_2^2$  curve looks way off.

