

$\mathcal{F}(k) :$

Wavelets, locally adaptive regression spline,
trend filtering are optimal

$\mathcal{W}(k+1) :$

Linear smoothers are optimal

Linear smoothers
are suboptimal

Minimax linear rate:
 $n^{-(2k+1)/(2k+2)}$

Minimax rate:
 $n^{-(2k+2)/(2k+3)}$

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 $n^{-(2k+2)/(2k+3)}$

