



Fig. 9.1. A Wavelet Tour of Signal Processing, 3<sup>rd</sup> ed. Top: Original signal  $f$ . Middle: Signal  $f_N$  approximated from  $N = 128$  lower frequency Fourier coefficients, with  $\|f - f_N\|/\|f\| = 8.63 \cdot 10^{-2}$ . Bottom: Signal  $f_N$  approximated from larger scale Daubechies 4 wavelet coefficients, with  $N = 128$  and  $\|f - f_N\|/\|f\| = 8.58 \cdot 10^{-2}$ .