Fig. 10.2. A Wavelet Tour of Signal Processing, 3rd ed. The leaves at the depth m of the tree T are regrouped as sets S_k of 2^{m-l_k} nodes that are the leaves of a tree T_k whose root n_k is at the depth l_k. Here $m = 4$ and $l_1 = 2$ so S_1 has 2^2 nodes.