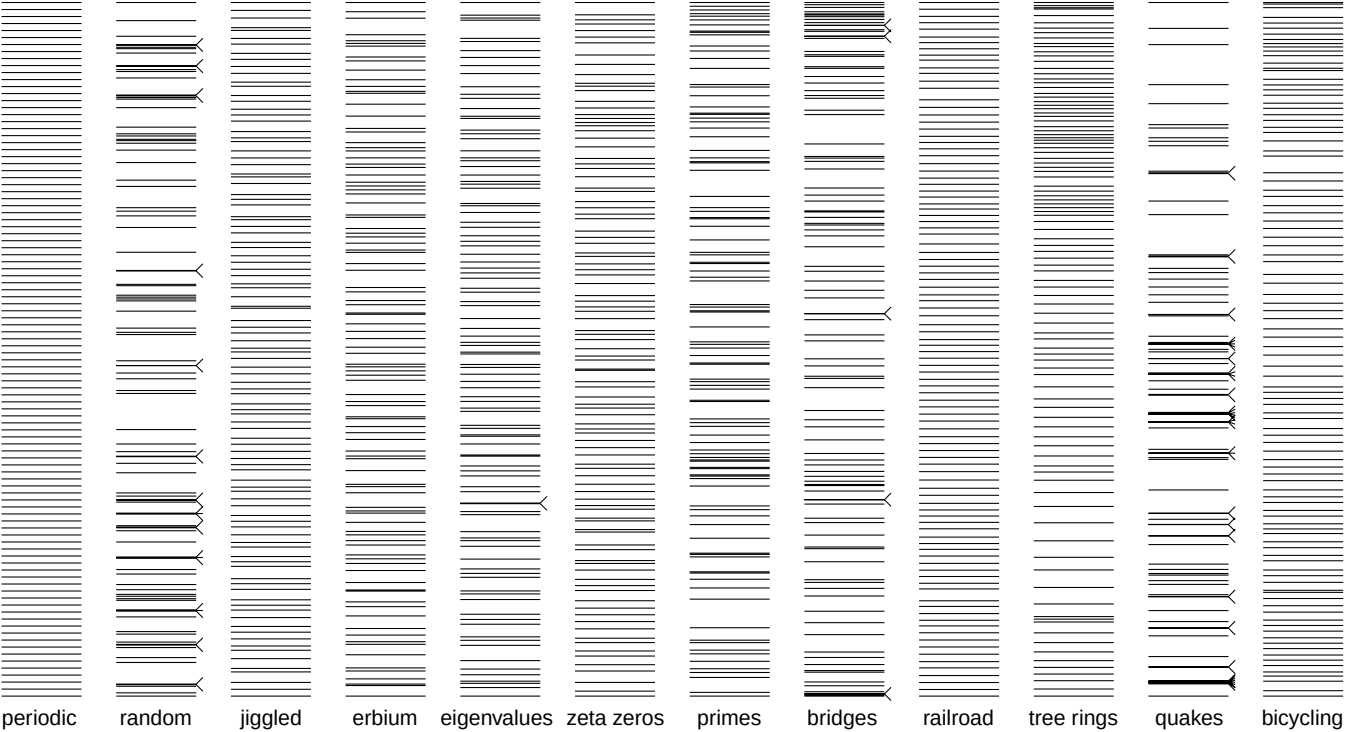

Figure 1. One-dimensional distributions each consist of 100 levels. From left to right the spectra are: a periodic array of evenly spaced lines; a random sequence; a periodic array perturbed by a slight random "jiggling" of each level; energy states of the erbium-166 nucleus, all having the same spin and parity quantum numbers; the central 100 eigenvalues of a 300-by-300 random symmetric matrix; positions of zeros of the Riemann zeta function lying just above the 10^{22}nd zero; 100 consecutive prime numbers beginning with 103,613; locations of the 100 northernmost overpasses and underpasses along Interstate 85; positions of crossties on a railroad siding; locations of growth rings from 1884 through 1983 in a fir tree on Mount Saint Helens, Washington; dates of California earthquakes with a magnitude of 5.0 or greater, 1969 to 2001; lengths of 100 consecutive bike rides.