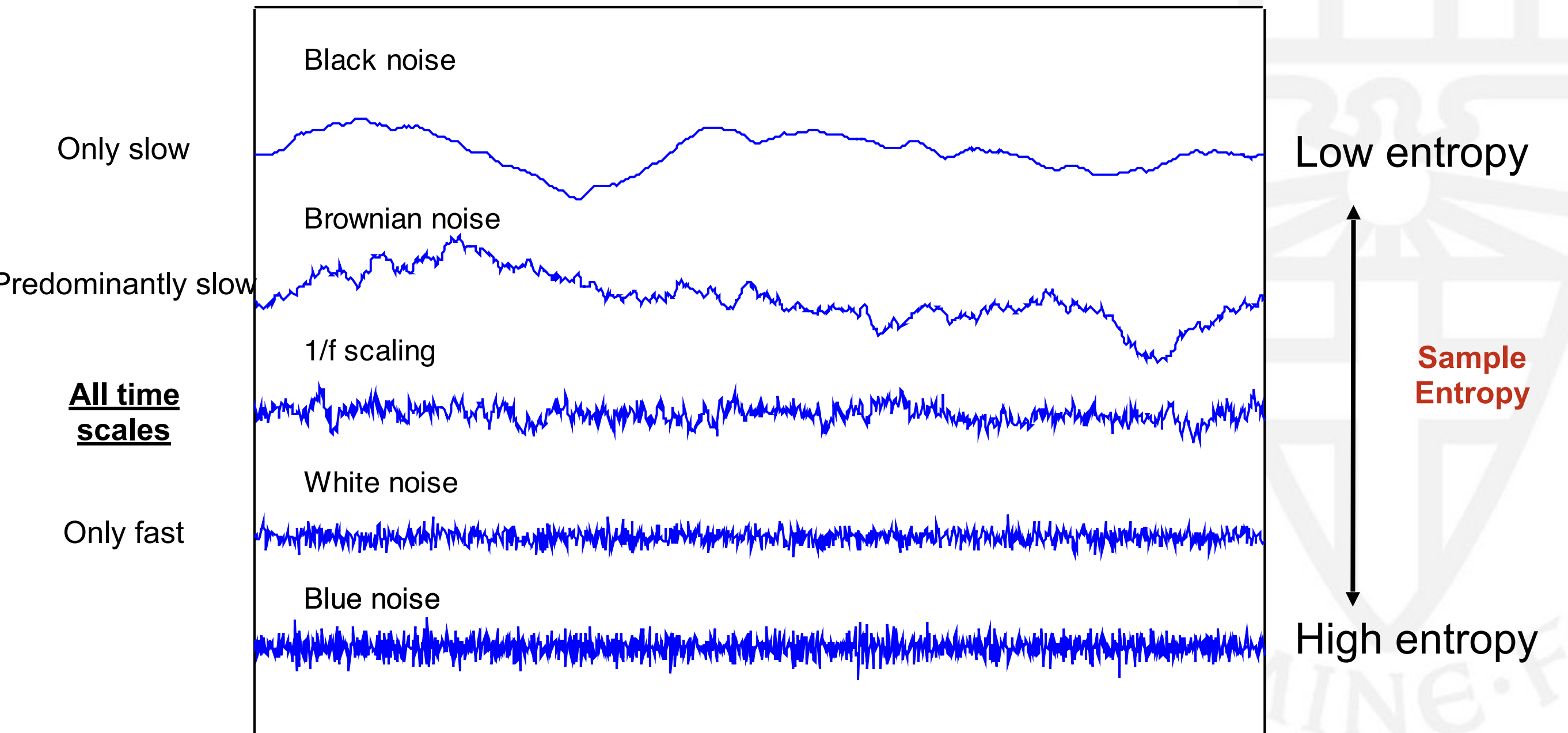


Temporal properties of variability: Sample entropy



Entropy in time series data

Sample entropy

- $P = A(k)/B(k)$
 - A : # of data segment of length $m+1$ are within distance $< r$
 - B : # of data segment of length m are within distance $< r$
- The negative natural logarithm of the conditional probability that a dataset of length N , having repeated itself within a tolerance r for m points, will also repeat itself for $m + 1$ points.
- $\text{SampEn}(m, r, N) = -\ln P$