

1046-65-1292      **Peter W Jones\*** ([jones@math.yale.edu](mailto:jones@math.yale.edu)), Mathematics Department, Yale University, 10 Hillhouse Ave., New Haven, CT 06510. *Scales and Geometry in Data Sets*.

We will describe different notions of scale in data sets and discuss some recent ideas for finding them. We will give several examples, including image processing and time series. We will also discuss how randomization algorithms can be used to detect various scales. (Received September 15, 2008)