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A Generalized Lambda Distribution (GLD) Change Point Model For the Detection of DNA Copy Number Variations in Array CGH Data

In this talk, we study the detection of the multiple change points of parameters of generalized lambda distributions (GLD). The advantage of studying the GLD is that the GLD family is broad and flexible, compared to the other distributions. There are fewer restrictions on the distribution while fitting the data. We combine the binary segmentation procedure together with Schwarz information criterion (SIC) to search all the possible change points in the data. The method is applied on fibroblast cancer cell line data which is publicly available, and change points are successfully located.