



Multivariate mixed linear-circular galaxy data

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We consider a data set on galaxy with three variables, one linear (energy), and two circular measurements. We have 68 trivariate data points. In intend to fit the data with a proper distribution. We consider several copula based models and also derived models based on suitable transformations. We carry out model selection to find the best possible model in this context. The fitted probability model for such mixed data is then used for developing appropriate clustering technique for such mixed data and to use the data for this purpose.

Key words: multivariate, linear-circular, clustering, galaxy