Abstract:

Over the last few years, the analysis of three-way and multiway data has become more prevalent in the literature. Such data come in the form of matrices or higher order tensors with examples being multivariate longitudinal data, as well as greyscale and coloured images. This talk will present four skewed tensor distributions which generalize their multivariate and matrix variate counterparts to higher order tensors. In addition, their use in a finite mixture model context will be considered for clustering and classification purposes. Both simulated and real data will be used for illustration.