National Institute of Technology Rourkela

Departmental Seminar

Seminar Title	: Stochastic comparison results between two finite mixture models
Speaker	: Suchandan Kayal
Supervisor	: Suchandan Kayal
Venue	: Department Seminar Hall
Date and Time	: 30 Dec 2024 (11.30 AM)

Abstract   : Finite mixture (FM) models have found key applications in many fields. Recently, some discussions have been made on comparing finite mixture models. In this paper, we discuss the stochastic comparison of two FM models with respect to the usual stochastic order when the mixture components have a general family of distributions. This problem has been studied when there is heterogeneity in one parameter (i.e., the distributional parameter), as well as when there is heterogeneity in two parameters (i.e., the distributional parameter and the mixing proportions). The sufficient conditions considered are based on p-larger order and reciprocally majorization order. Several examples have been provided to illustrate the established results.