University of Hyderabad
School of Mathematics and Statistics,

Seminar on

"COMPOSITIONAL DATA ANALYSIS AND ITS APPLICATIONS"

by Prof. Michelle Gallo
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Google Meet link:

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Abstract

Abstract Three-way rating data on customer satisfaction contain the scores assigned by a group of judges to a set of observable traits of service quality at different occasions. Such data provide information on the magnitude of satisfaction as well as information on the relative variability of traits with respect to each other. Data magnitude is predominant in determining variability patterns, thus, any standard three-way tool applied to these arrays would only yield a one-dimensional solution measuring scale changes. Relative variability goes completely undetected unless additional steps are taken.

In this work a compositional approach in combination with the CANDECOMP/ PARAFAC model is suggested to explore relative variation patterns. A case study on student satisfaction is presented to demonstrate that this method provides an insightful analysis of the role played by each aspect in generating satisfaction throughout degree programs and years. For completeness compositional results are compared to those of a standard CP.