

Title: Bivariate Conway-Maxwell-Poisson Distributions

Abstract: Bivariate count data analysis requires model development that takes into account the discrete nature while likewise accounting for data dispersion. While distributions like the bivariate Poisson, bivariate negative binomial, etc. can be appealing, they suffer from various limitations. This talk introduces the audience to various bivariate Conway-Maxwell-Poisson formulations and discusses the trade-offs associated with the respective forms. Time permitting, we will further consider broader multivariate settings.