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Ryan Gill*, 328 Natural Sciences Building, Department of Mathematics, University of Louisville, Louisville, KY 40292, and **Rasitha Jayasekare** and **Kiseop Lee**. *Asymptotic properties of the MLE in a Poisson mixture model with applications.*

In this talk, results concerning weak consistency and asymptotic normality of the maximum likelihood estimator of the parameter vector for a Poisson mixture model are discussed. Asymptotic confidence intervals are derived based on the asymptotic normality and applied to tick-by-tick stock data to model changes in the price of a stock based on the size of a trade. (Received February 06, 2017)