1053-62-18 **Nicole A. Lazar*** (nlazar@stat.uga.edu), Department of Statistics, University of Georgia, Athens, GA 30602. *On the Use of Empirical Likelihood for the Analysis of Longitudinal Data.* Preliminary report.

Longitudinal data are commonplace in medical, psychological, and sociological applications. As such, many methods, both parametric and non-parametric, have been developed for their analysis. In this talk, I discuss the use of the non-parametric method of empirical likelihood (EL) for analyzing longitudinal data. This topic has generated interest of late, with several authors exploring EL in the longitudinal data setting. The connections are clear, as estimating equations play a critical role in EL and in longitudinal data analysis. I will discuss these connections, as well as the ways they have been exploited thus far in the recent literature in the first part of the talk. In the second part of the talk, I will focus on the use of EL specifically for selecting the covariance structure imposed on the model for longitudinal data.

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