1135-K5-1557 **Allen G Harbaugh*** (harbaugh@bu.edu). *Clarifying and Reimagining the Empirical Rule: An Introduction to the By-Thirds Rule.*

This talk explores the pedagogic value of the 68-95-99.7 empirical rule (ER) presented in nearly every introductory statistics class. The value of the conventional rule will be examined in parallel with the methods in which it is frequently used, the manner in which it is presented in textbooks, and the historical context from which it evolved. A critical examination of the outcomes and effectiveness of teaching this concept to our students will reveal that the ER is best suited to serve as (1) a reasonable approximation for mental calculations and (2) a bridge to more complicated concepts and calculations. Alas, in its current incarnation, the ER apparently fails to accomplish these goals for most students. Finally, a revised version of the ER—preliminary coined the "By-Thirds Rule"—will be introduced. It will be demonstrated how this revised rule accomplishes the desired outcomes. Additionally, some history of statistics will be revisited to show that the revised ER more naturally mirrors the historical context from which the ER emerged. A key element of this talk is that it addresses introductory statistics instruction for an array of audiences, ranging from courses for mathematics majors to courses found in many social science undergraduate and graduate programs. (Received September 24, 2017)