962-A1-1140 Anant P Godbole* (godbolea@etsu.edu), Box 70663, Math Dept, ETSU, Johnson City, TN 37614. The Glivenko-Cantelli Theorem and its generalizations.

The Glivenko Cantelli theorem has been alternately described as "the fundamental theorem of statistics" and "the existence theorem for statistics as a branch of applied mathematics." Loosely speaking, it states that empirical sample data "converges" to that contained in the population. Several refinements of this result have been proved. Paradoxically, however, the Glivenko Cantelli thorem is not as well-known to statisticians and mathematicians as it should be. In this talk, we will survey some history, sketch proofs, and give examples – while providing motivation at all points. (Received October 02, 2000)