

# ASTROSTATISTICS: PAST, PRESENT AND FUTURE

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ABSTRACT. Following a brief philosophical discussion of the role of statistical inference in science inference, we trace the history of astronomy and statistics. The fields were intertwined from antiquity through the 19th century, but broke contact during the 20th century. As a result, astronomers under-utilized important capabilities of modern statistics. The situation has improved in the past two decades with improved education and the emergence of the cross-disciplinary research field of astrostatistics. Today, the analysis of data-rich astronomical surveys and the links between astronomical data and astrophysical theory are increasingly assisted by modern methodology. Collaboration between scholars in the two fields is growing and enriching both enterprises

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