



The University of Chicago
Department of Statistics

Seminar Series

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Improved Confidence Intervals for Contingency Table Parameters

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133 Eckhart Hall, 5734 S. University Avenue
Refreshments following the seminar in Eckhart 110.

ABSTRACT

In many settings, asymptotic approximations are relied upon to construct confidence intervals for contingency table parameters. Wald and score approximate confidence intervals are standard examples. Although the literature suggests that score intervals are better than Wald intervals, the harder-to-compute score intervals have been used in very few instances. This presentation (1) gives empirical evidence that score intervals are better than Wald intervals, (2) explains why score intervals have only been used for a restrictive class of parameters, and (3) describes a computational algorithm that significantly broadens the applicability of the score interval approach. Two simple examples illustrate the ideas.