Goodness–of–fit tests being components of partitions of chi–squared test statistics

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Abstract

Goodness–of–fit tests for continuous distributions via characterizing conditions in terms of expected values of two functions of order statistics or record values were presented in Morris and Szynal (2007), Szynal (2007) and Szynal (2008). Now we are interested in goodness–of–fit tests derived via partitions of chi–squared test statistics. The formulae of the tests obtained in this way are proposed as new goodness–of–fit tests. We include empirical study comparising powers of recommended tests and presented tests of exponentiality for particular alternatives.

Keywords

Goodness–of–fit tests, Order statistics, Record values, χ^2 test statistics, Characterizations.

References

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