

# A CLASS OF MULTIPLE SAMPLE TESTS BASED ON EMPIRICAL COVERAGES

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**Abstract.** A class of multiple sample tests based on empirical coverages is proposed which is a generalization of Greenwood's and Sherman's one-sample goodness-of-fit test statistics. The asymptotic normality of the tests is established by embedding the empirical coverages into a stationary process satisfying the strong mixing condition.

*Key words and phrases:* Spacing, strong mixing condition, asymptotic normality.