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Maximal invariants over symmetric cones

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Abstract

In this talk we extend the definition of some non-central distributions, derive the joint density of the eigenvalues of a generalized Wishart distribution, and propose a test statistic analog to the Bartlett's test, which tests the equality of variances across a normally distributed population. This test generalizes to all types of Wishart distributions, namely, real, complex, quaternion, Lorentz and exceptional types.