

LOCALLY MINIMAX TESTS IN SYMMETRICAL DISTRIBUTIONS*

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Abstract. In this paper we give an extension of the theory of local minimax property of Giri and Kiefer (1964, *Ann. Math. Statist.*, **35**, 21-35) to the family of elliptically symmetric distributions which contains the multivariate normal distribution as a member.

Key words and phrases: Hunt-Stein theorem, locally best invariant test, locally minimax test, uniformly most powerful invariant test, maximal invariant, nonnull robustness, null robustness, Wijsman's representation theorem.