

中央研究院統計科學研究所 學術演講

講題：Characterizations of the Normal
Distribution via the Independence of the
Sample Mean and the Feasible Definite
Statistics with Ordered Arguments

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時間：2021年12月6日 (星期一) 上午10:30-12:00

地點：中央研究院統計科學研究所 B1F 演講廳

※茶會：上午10:10開始

※實體與線上視訊同步進行

Abstract

It is well known that the independence of the sample mean and the sample variance characterizes the normal distribution. By using Anosov's theorem, we further investigate the analogous characteristic properties in terms of the sample mean and some feasible definite statistics. The latter statistics are based on nonnegative, definite and continuous functions of ordered arguments with positive degree of homogeneity. The proposed approach seems to be natural and can be used to derive easily characterization results for many feasible definite statistics, such as known characterizations involving the sample variance, sample range as well as Gini's mean difference. [A joint work with Chin-Yuan Hu, National Changhua University of Education, Taiwan]

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