Using Edgeworth expansion approximating two- and three-dimensional probability distribution functions

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In this talk we present the techniques for approximating unknown distribution function with a well-known and well-studied distribution function. The development of approximation technique is closely related with development of matrix algebra. We also present some newer results of matrix algebra. For more detailed presentation of this kind matrix algebra see [1] , [3], [2], for example. Some results on Edgeworth expansions are presented in [4] where a two-dimensional distribution function is approximated by means of the Edgeworth type expansion. In this presentation we generalize the Edgeworth expansion to the three-dimensional case. This presentation is supported by Estonian Science Foundation Grant 7656.

References

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