

Workshop about symbolic manipulations with random variables using Maple CAS

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Probability theory and statistics are relatively younger branches of mathematics, compared to the algebra, geometry or analysis. Therefore it is not surprising that the strengths of the Symbolic Algebra Systems (CAS) are in the realizations of the algebraic, geometric or analysis algorithms, while the symbolic treatments of the statistical algorithms are in its beginning. Most of the available statistical programs (SPSS, SAS, Excel, Minitab, ...) are also performing their calculations in numeric way.

The symbolic manipulations with random variables are available by using of the Maple procedures from the "Statistics" package. These facilities are unique among the CAS programs. In this workshop some theoretical results and practical exercises are collected from the area of continuous random variables which can be obtained by using the Maple CAS. It would be convenient for us if the participants find similar problems and let we try to solve them collectively by using the procedures concerning to random variables from the Maple "Statistics" package.