G.M. Maniya and the Theory of Sums of a Random Number of Random Variables

Lev B. Klebanov[a]

Abstract

In the talk there is given a survey of G.M. Maniya's work on the theory of summation of random number of random variables. Some new results obtained in this theory are represented. We also discuss possible applications of this theory to modeling of dielectric relaxation.

Key words: sums of random number of random variables; infinite divisibility; random stability; dielectric relaxation

References

[1] L.B. Klebanov, G.M. Maniya, J.A. Melamed (1984), *A problem of Zolotarev and analogs of infinitely divisible and stable distributions in a scheme for summing a random number of random variables*, Theory Probab. Appl., 29: 791-794.

[2] L.B. Klebanov, G.M. Maniya, J.A. Melamed (1985), *Analogs of infinitely divisible and stable laws for sums of random number of random variables*, Fourth Intern. Vilnius Conference on the Theory of Probability and Mathematical Statistics, 2: 40-41 (in Russian).

[3] L.B. Klebanov, G.M. Maniya, J.A. Melamed (1987), *ν_p-strictly stable laws and the estimation of their parameters*, Lecture Notes in Math, 1233, 21-31, Springer, Berlin.

[a]Department of Probability and Mathematical Statistics, Charles University, Prague, Czech Republic