

## The dispersive stochastic orders: univariate and multivariate

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This talk will be given in the Bartoszewicz Memorial Session. Jarosław Bartoszewicz did a lot of work on stochastic orders such as the convex transform order, the star order, the superadditive order, as well as the Laplace transform order, the Laplace transform ratio order, the reversed Laplace transform ratio order, and other orders.

One order in which Bartoszewicz's contributions are quite remarkable is the dispersive stochastic order. In this talk I will first review the univariate dispersive order. I will then continue in describing some multivariate extensions of the univariate dispersive order. References will be made to some works of Jarosław Bartoszewicz from 1985 through 2001, all involving the dispersion orders, with applications to the orderings of order statistics.

### References

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- J. Bartoszewicz (2001). Stochastic comparisons of random minima and maxima from life distributions, *Statistics and Probability Letters* **55**, 107–112.