

Sequence ordering and applications

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Abstract

On the set of (finite) sequences of real numbers, we introduce a natural ordering relation, closely connected to the stochastic ordering of random variables. We present some of the properties of this ordering, and we derive some of its applications (a general Cauchy condensation theorem, convex ordering of Pólya random variables, etc).

We conclude with some extensions to the case of sequences of complex numbers (work in progress).

The talk is based on joint work with Nicolae R. Pascu (Kennesaw State University, USA) and Antonia Ioana Țacă (Transilvania University of Braşov, Ph.D. student).