

Łukasiewicz tribes as probability domains

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Abstract

Generalized probability on Łukasiewicz tribes has been studied e.g. in [8], [5], [6], [7], [4], [1], [2]. We show (cf. [3]) that (within systems of $[0, 1]$ -valued functions) Łukasiewicz tribes are characterized by few natural properties of domains of probability. Further, σ -fields of sets (domains of classical probability) are the “minimal” and measurable $[0, 1]$ -valued functions (domains of fuzzy probability) are the “maximal” Łukasiewicz tribes.

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