



On Idempotent D-Norms

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Replacing the spectral measure by a random vector Z allows the representation of a multivariate max-stable distribution with standard negative margins via a norm, called D-norm, whose generator is Z . We investigate the set of all generators in detail. This approach towards multivariate extreme value distributions entails the definition of a multiplication type operation on the set of D-norms leading to idempotent D-norms. We characterize the set of idempotent D-norms. Iterating the multiplication provides a track of D-norms, whose limit exists and is again a D-norm. If this iteration is repeatedly done on the same D-norm, then the limit of the track is idempotent.

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