bm-CENTRAL LIMIT THEOREMS ASSOCIATED WITH NON-SYMMETRIC POSITIVE CONES

Lahcen Oussi
Janusz Wysoczański

Abstract: Analogues of the classical Central Limit Theorem are proved in the non-commutative setting of random variables which are bm-independent and indexed by elements of positive non-symmetric cones, such as the circular cone, sectors in Euclidean spaces and the Vinberg cone. The geometry of the cones is shown to play a crucial role and the related volume characteristics of the cones is shown.

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