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ROTATABLE RANDOM SEQUENCES IN LOCAL FIELDS

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Abstract of Report Talk: An infinite sequence of real random variables (ξ_1, ξ_2, \dots) is said to be rotatable if every finite subsequence (ξ_1, \dots, ξ_n) has a spherically symmetric distribution. A classical theorem of David Freedman says that (ξ_1, ξ_2, \dots) is rotatable if and only if $\xi_j = \sigma\eta_j$ for all j , where (η_1, η_2, \dots) is a sequence of independent standard Gaussian random variables and σ is an independent nonnegative random variable. We establish the analogue of Freedman's result for sequences of random variables taking values in local fields and analogues of other related results.

[Joint work with Steven Evans]

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