Rotatable Random Sequences in Local Fields

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Abstract of Report Talk: An infinite sequence of real random variables $(\xi_1, \xi_2, \ldots)$ is said to be rotatable if every finite subsequence $(\xi_1, \ldots, \xi_n)$ has a spherically symmetric distribution. A classical theorem of David Freedman says that $(\xi_1, \xi_2, \ldots)$ is rotatable if and only if $\xi_j = \sigma \eta_j$ for all $j$, where $(\eta_1, \eta_2, \ldots)$ is a sequence of independent standard Gaussian random variables and $\sigma$ 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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