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Titre: Eigenvector convergence for minors of unitarily invariant infinite random matrices.

Abstract: Pickrell has fully characterized the unitarily invariant probability measures on infinite Hermitian matrices, and an alternative proof of this classification has been found by Olshanski and Vershik. Borodin and Olshanski deduced from this proof that under any of these invariant measures, the extreme eigenvalues of the minors, divided by the dimension, converge almost surely.

We have proven that one also has a weak convergence for the eigenvectors, in a sense which is made precise. After mapping Hermitian to unitary matrices via the Cayley transform, our result extends a convergence proven in our paper with Maples and Nikeghbali, for which a coupling of the Circular Unitary Ensemble of all dimensions is considered.