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A central limit theorem for the star-generators of the infinite symmetric group

I will present a result with flavour of Central Limit Theorem which takes place in the framework of the infinite symmetric group S_{∞} , and refers to a character of S_{∞} parametrized by a positive integer d. The limit law appearing in this theorem can be described by using Hermite functions, due to its connection with the empirical eigenvalue distribution of a Gaussian Hermitian (GUE) random matrix of size $d \times d$. This is joint work with Claus Koestler, arXiv:1807.05633.