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Mihai Stoiciu* (mstoiciu@williams.edu), Department of Mathematics and Statistics, Williams College, Williamstown, MA 01267. *The Eigenvalue Distribution for Random Unitary Matrices: An Approach Using Entropy*. Preliminary report.

We consider CMV matrices $\mathcal{C} = \mathcal{C}(\omega)$ with independent random Verblunsky coefficients $\alpha_n = \alpha_n(\omega)$. The microscopic eigenvalue distribution of the random unitary matrix $\mathcal{C}(\omega)$ depends on the rate of decay of the variance of the Verblunsky coefficients $\alpha_n(\omega)$: Poisson for slow decay and “picket fence” (clock) for fast decay. We investigate the transition Poisson-Clock from the perspective of the entropy of the random variables $\{\alpha_n(\omega)\}_{n \geq 0}$. (Received January 18, 2022)