1057-82-318 Mihai Stoiciu* (mstoiciu@williams.edu), Williams College, Department of Mathematics and Statistics, Bronfman Science Center, Williamstown, MA 01267, and Norbert Peyerimhoff. Eigenvalue Distribution of Unitary Operators Associated to Hyperbolic Reflection Groups. Preliminary report.

The CMV matrices are the unitary analogues of the discrete one-dimensional Schrödinger operators. We study singular continuous measures generated by hyperbolic reflection groups and the spectral properties of the CMV matrices associated to these measures. As the Hausdorff dimension of the support of the singular measures increases from 0 to 1, the distribution of the eigenvalues of the CMV matrices approaches the "clock" (picket fence) distribution. (Received January 25, 2010)