

1135-47-1869

**M. T. Jury** and **R. T.W. Martin\***, Robert.Martin@uct.ac.za. *Non-commutative Clark measures for the free and abelian Toeplitz algebras.*

In classical Hardy space theory, there is a natural bijection between the Schur class of contractive analytic functions in the complex unit disk and Aleksandrov-Clark measures on the unit circle. A canonical several-variable analogue of Hardy space is the Drury-Arveson space of analytic functions in the unit ball of  $d$ -dimensional complex space. Drury-Arveson space can be naturally identified with symmetric Fock space, and under this identification, the canonical non-commutative or free analogue of several-variable Hardy space is the full Fock space over  $d$ -dimensional complex space.

We will extend the concept of Aleksandrov-Clark (AC) measure, the bijection between the Schur class and AC measures, Clark's unitary perturbations and several associated results to the several-variable settings of the analytic Toeplitz algebras for Drury-Arveson and Fock space (the unital (WOT)-closed operator algebras of the Arveson  $d$ -shift and the left free shift of left creation operators). (Received September 25, 2017)