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The Cuntz semigroup of dimension drop C-algebras*

Recently R. Antoine, F. Perera and L. Santiago obtained for the first time the Cuntz semigroup for dimension drop C*-algebra. In our talk we calculate the Cuntz semigroup of dimension drop C*-algebras based on a new and simpler method that uses strict comparison of positive elements. Even though many years have passed since Cuntz introduced what we now call the Cuntz semigroup, only recently, starting with the work of Andrew Toms, the remarkable relevance of the Cuntz semigroup in the C*-algebra's classification program has become clear. In fact at the 2010 COSY meeting held in Fredericton, George Elliott reformulated his famous conjecture in terms of the Cuntz semigroup and K_1 -group. Computation of the Cuntz semigroup is an important part of the classification of C*-algebras, because it provides the range of the invariant.