

1090-47-141

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We take a new look at dilation theory for nonself-adjoint operator algebras. Among the extremal (co)extensions of a representation, there is a special property of being fully extremal. This allows a refinement of some of the classical notions which are important when one moves away from standard examples. We show that many algebras including graph algebras and tensor algebras of C^* -correspondences have the semi-Dirichlet property which collapses these notions and explains why they have a better dilation theory. This leads to variations of the notions of commutant lifting and Ando's theorem. This is applied to the study of semicrossed products by automorphisms, and endomorphisms which lift to the C^* -envelope. In particular, we obtain several general theorems which allow one to conclude that semicrossed products of an operator algebra naturally imbed completely isometrically into the semicrossed product of its C^* -envelope, and the C^* -envelopes of these two algebras are the same. (Received February 26, 2013)