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On ℓ-open and ℓ-closed C^*-algebras.

A separable C^*-algebra A is said to be ℓ-open (or ℓ-closed) when the image of Hom(A, B) is open (or closed) in Hom(A, B/I), for all separable C^*-algebras B and ideals I. The concept of semiprojectivity has been used many times in the classification of C*-algebras. Bruce Blackadar introduced ℓ-open and ℓ-closed C^*-algebras as a superclass of semiprojective C^*-algebras.

In recent work with A. Tikuisis, we characterize ℓ-open and ℓ-closed C^*-algebras and deduce that ℓ-open C^*-algebras are ℓ-closed as conjectured by Blackadar. Moreover, we show that the notion of ℓ-open C^*-algebras and semiprojective C^*-algebras coincide for commutative unital C^*-algebras.