

1113-47-242

Scott A. Atkinson* (saa6uy@virginia.edu). *Convex Sets Associated to C^* -Algebras.*

Given a separable C^* -algebra \mathfrak{A} , we can associate to it an invariant given by the weak approximate unitary equivalence classes of $*$ -homomorphisms from \mathfrak{A} to a chosen separable McDuff II_1 -factor M . One can show that this object takes the form of a closed, bounded, convex subset of a separable Banach space. This invariant is closely related (and sometimes affinely homeomorphic) to the trace space of \mathfrak{A} , but its data is different from that of the trace space in general. We will provide a characterization of extreme points of these convex sets in the cases where either \mathfrak{A} is nuclear or $M = R$ —the separable hyperfinite II_1 -factor. If time permits, we will discuss some related open problems. (Received August 24, 2015)