A NEW CLASS OF HYPERFINITE KADISON–SINGER FACTORS

FEI MA AND YE ZHANG

Abstract. In this paper, we construct a new class of hyperfinite Kadison-Singer factors on separable Hilbert spaces, and we show that each of these Kadison-Singer factors is isomorphic to a subalgebra of CSL algebra. Moreover, a sufficient and necessary condition for two of these Kadison-Singer factors being isometrically isomorphic is given. Finally, we obtain that every norm preserving automorphism on these Kadison-Singer algebras is inner.


Keywords and phrases: Kadison-Singer algebra, Kadison-Singer lattice, hyperfinite KS-factor, CSL algebra.

REFERENCES