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Order structure of the Figà-Talamanca-Herz algebra.

ABSTRACT. In this paper we define an order structure on the Figà-Talamanca-Herz algebra, $A_p(G)$, of a locally compact group G . We study the interplay between the order structure and p -operator space structure of Figà-Talamanca-Herz algebra. We show that for amenable groups, an order and algebra isomorphism of Figà-Talamanca-Herz-algebras yields to an isomorphism or anti-isomorphism of the underlying groups. Also a known result of Herz about the density of $A(G)$ in $A_p(G)$, for an amenable group G , could be proved using the order structure of these algebras.