ORTHOGONALITY AND DISJOINTNESS PRESERVING LINEAR MAPS BETWEEN FOURIER AND FOURIER-STIELTJES ALGEBRAS OF LOCALLY COMPACT GROUPS

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ABSTRACT. We show that a linear bijection $\psi : A(G_1) \to A(G_2)$ (resp. $\psi : B(G_1) \to B(G_2)$) between two Fourier algebras (resp. Fourier-Stieltjes algebras) of locally compact groups will induce a topological group isomorphism between G_1 and G_2, provided that ψ preserves both disjointness and some kinds of orthogonality. In the development, general results about disjointness and orthogonality preserving linear maps between C*-algebras, W*-algebras and their preduals are obtained (joint work with Anthony Lau).

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