

# İSTANBUL ANALYSIS SEMINARS

## BEURLING–FIGÀ-TALAMANCA–HERZ ALGEBRAS

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**Abstract:** Let  $G$  be a locally compact group and  $1 < p < \infty$ . We introduce and study the Beurling–Figà-Talamanca–Herz algebras, denoted by  $A_p(G, w)$ . These are precisely the Beurling algebras on the dual group  $\widehat{G}$ , for  $p = 2$  and abelian  $G$ . Our approach contains an earlier one by H.H. Lee and E. Samei, for  $p = 2$  and compact  $G$ . We also obtain that a locally compact group  $G$  is amenable if and only if  $A_p(G, w)$  has a bounded approximate identity.

This is joint work with V. Runde and N. Spronk.

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