

GENERALIZED COORBIT THEORY, BANACH FRAMES,
AND THE RELATION TO α -MODULATION SPACESSTEPHAN DAHLKE, MASSIMO FORNASIER, HOLGER RAUHUT,
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ABSTRACT

This paper is concerned with generalizations and specific applications of the coorbit space theory based on group representations modulo quotients that has been developed quite recently. We show that the general theory applied to the affine Weyl–Heisenberg group gives rise to families of smoothness spaces that can be identified with α -modulation spaces.