

# A DICHOTOMY FOR HORMANDER-TYPE OSCILLATORY INTEGRAL OPERATORS

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Hormander 1973 proposed to study a generalized Fourier extension operator, and asked whether the generalized operator satisfies the same  $L^p$  bounds as that of the standard Fourier extension operator. Surprisingly, Bourgain 1991 gave a negative answer to Hormander's question. In this talk, I will discuss a modification of Hormander's question whose answer may be affirmative. This is a joint work with Hong Wang and Ruixiang Zhang.