



INDIAN INSTITUTE OF TECHNOLOGY GUWAHATI
SHORT ABSTRACT OF THESIS

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SHORT ABSTRACT

In general, the uncertainty principle states that a non-zero function and its Fourier transform cannot both be sharply localized. And depending on different localization assumptions, various types of results related to the uncertainty principle for Fourier transform appeared. In this thesis, localization is described through the support of the function and its Fourier transform, and we consider two variants of the uncertainty principle, namely, the Heisenberg uniqueness pair and Benedicks-Amrein-Berthier theorem.