

ON A THEOREM OF CHERNOFF WITH
APPLICATIONS TO INGHAM'S UNCERTAINTY
PRINCIPLE

SUNDARAM THANGAVELU

ABSTRACT

Ingham's uncertainty principle (proved originally on \mathbf{R}) explores the admissible decay for Fourier transforms of functions which vanish on an open set. One way to prove such results is to use a theorem of Chernoff (proved originally on \mathbf{R}^n) which deals with characterising quasi-analytic functions in terms of a Carleman condition involving powers of the Laplacian. In this talk we will give a survey of recent developments dealing with these two theorems in various contexts that include Riemannian symmetric spaces and Heisenberg groups.

INDIAN INSTITUTE OF SCIENCE
E-mail address: `veluma@iisc.ac.in`