

APPLIED MATHEMATICS SEMINAR
Department of Mathematics
University of West Georgia
4 PM, MONDAY, SEPTEMBER 12, 2005, BOYD 330

Speaker: Dr. Amin Boumenir

Title: **The Inverse Laplace Transform and Analytic Pseudo-Differential Operators**

Abstract

By comparing the Laplace transform \mathcal{L} with the differential operator D , we obtain a formula for the inverse Laplace transform

$$\mathcal{L}^{-1} = \frac{1}{\pi} V^{-1} \cos(\pi D) V \mathcal{L}$$

where V is a unitary transformation operator. This helps us obtain an explicit spectral representation of \mathcal{L} . Some applications of the above relation will be discussed..

All faculty and students are welcome.