

APPLIED MATHEMATICS SEMINAR
Department of Mathematics
University of West Georgia
4:40 PM, MONDAY, JANUARY 29, 2007, BOYD 330

Speaker: Dr. Kwang C. Shin, UWG

Title: **Half-line spectra for a class of non-self-adjoint Hill operators**

Abstract

In this talk, some results on non-self-adjoint Hill operators will be introduced. In 1980, Gasymov showed that non-self-adjoint Hill operators with complex-potentials $V(x) = \sum_{k=1}^{\infty} a_k e^{ikx}$ with $\sum_{k=1}^{\infty} |a_k| < +\infty$, have spectra $[0, \infty)$. I will present an alternative and elementary proof of this result. Also, we will talk about locations of Dirichlet and Neumann eigenvalues for the model operator with the potential e^{2ix} .

All are welcome.