APPLIED MATHEMATICS SEMINAR

Department of Mathematics

University of West Georgia

3:00 PM, WEDNESDAY, MARCH 4, 2009, BOYD 330

Speaker: Dr. Kwang Shin, UWG

Title: **Getting asymptotic solutions of Schrödinger equations: A "new" method. Part III**

Abstract

The so-called WKB and phase-integral methods are used to get higher order asymptotic solutions of Schrödinger equations. After a brief review on the WKB and phase-integral methods, I will introduce a method of Sibuya that has been used for theoretical purpose, but not for practical applications. Validity of general procedures of the WKB and phase-integral methods are somewhat dubious. Here we will show how the method of Sybuya is mathematically sound and can be used for practical purpose. A number of open problems will be suggested.

All are welcome.