

Analysis and Applied Mathematics Seminar

How to handle a small parameter in numerical computations?

Youngjoon Hong (UIC)

Abstract: Numerical methods for the partial differential equations have made enormous progress over the past decades. The needs in mathematical modeling for efficient numerical algorithms as an alternative to classical methods of applied mathematics have remarkably increased. In this talk, recent developments of numerical methods and computations for physical models with a small parameter are presented. More precisely, we explore the numerical methods for convection-dominated singularly perturbed problems and scattering problem in layered media.

Monday, November 6 at 4:00 PM in SEO 636