Computational and Applied Mathematics Seminar

Speaker:

Prof. Torsten Linß,
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Monday, May 7, 2018

1:00 p.m., HH-3017

On systems of singularly perturbed problems and their robust numerical approximation

Abstract:

A survey is given of current research into the numerical solution of systems of second-order differential equations whose diffusion coefficients are small parameters. Such problems are in general singularly perturbed. The equations in these systems may be coupled through their reaction and/or convection terms. Only numerical methods whose accuracy is guaranteed for all values of the diffusion parameters are considered here.