

9781107163225 LI, QIAO AND TANG – NUMERICAL SOLUTION OF DIFFERENTIAL EQUATIONS PPC C M Y K

This introduction to finite difference and finite element methods is aimed at graduate students who need to solve differential equations. The prerequisites are few (basic calculus, linear algebra, and ordinary differential equations) and so the book will be accessible and useful to readers from a range of disciplines across science and engineering. Part I begins with finite difference methods. Finite element methods are then introduced in Part II. In each part, the authors begin with a comprehensive discussion of one-dimensional problems, before proceeding to consider two or higher dimensions. An emphasis is placed on numerical algorithms, related mathematical theory, and essential details in the implementation, while some useful packages are also introduced. The authors also provide well-tested MATLAB® codes, all available online.

ZHILIN LI is a tenured full professor at the Center for Scientific Computation & Department of Mathematics at North Carolina State University. His research area is in applied mathematics in general, particularly in numerical analysis for partial differential equations, moving interface/free boundary problems, irregular domain problems, computational mathematical biology, and scientific computing and simulations for interdisciplinary applications. Li has authored one monograph, *The Immersed Interface Method*, and also edited several books and proceedings.

ZHONGHUA QIAO is an assistant professor in the Department of Applied Mathematics at the Hong Kong Polytechnic University.

TAO TANG is a professor in the Department of Mathematics at South University of Science and Technology, Hong Kong.

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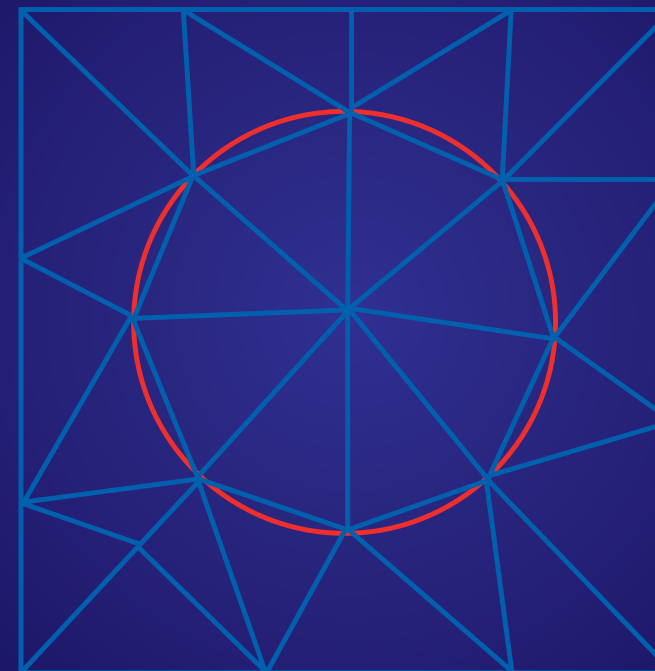


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LI, QIAO AND TANG **Numerical Solution of Differential Equations**

Numerical Solution of Differential Equations

Introduction to Finite Difference and Finite Element Methods



ZHILIN LI, ZHONGHUA QIAO
AND TAO TANG