Christian Grossmann Hans-Görg Roos

Numerical Treatment of Partial Differential Equations

Translated and revised by Martin Stynes

Springer

Prof. Dr. Christian Grossmann
Prof. Dr. Hans-Görg Roos

Institute of Numerical Mathematics
Department of Mathematics
Technical University of Dresden
D-01062 Dresden, Germany

e-mail: Christian.Grossmann@tu-dresden.de
Hans-Goerg.Roos@tu-dresden.de

Prof. Dr. Martin Stynes

School of Mathematical Sciences
Aras na Laoi
University College Cork
Cork, Ireland

e-mail: m.stynes@ucc.ie

Mathematics Subject Classification (2000): 65N, 65F

Translation and revision of the 3rd edition of "Numerische Behandlung Partieller Differentialgleichungen" Published by Teubner, 2005.

Library of Congress Control Number: 2007931595

ISBN: 978-3-540-71582-5 Springer Berlin Heidelberg New York

Springer is a part of Springer Science+Business Media
springer.com

Cover design: WMXDesign, Heidelberg
Typesetting by the authors and SPi using a Springer LaTeX macro package

Printed on acid-free paper SPIN: 11830948 46/2244/SPi 5 4 3 2 1 0

Contents