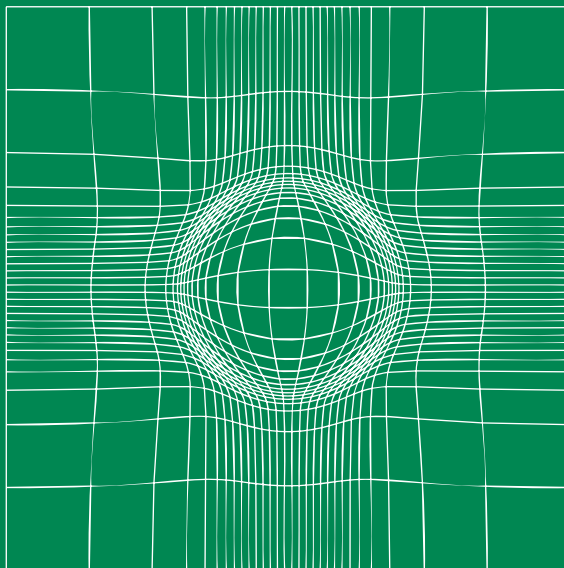


Acta

Numerica

Volume 18 2009



CAMBRIDGE
UNIVERSITY PRESS

Acta Numerica 2009

Managing editor

A. Iserles

*DAMTP, University of Cambridge,
Centre for Mathematical Sciences, Wilberforce Road,
Cambridge CB3 0WA, England*

Editorial Board

D. N. Arnold, *University of Minnesota, Minneapolis, USA*

C. de Boor, *University of Wisconsin, Madison, USA*

F. Brezzi, *Istituto di Analisi Numerica del CNR, Italy*

J. C. Butcher, *University of Auckland, New Zealand*

P. G. Ciarlet, *City University of Hong Kong, China*

W. Dahmen, *RTWH Aachen, Germany*

B. Engquist, *University of Texas, Austin, USA*

H.-O. Kreiss, *University of California, Los Angeles, USA*

M. J. D. Powell, *University of Cambridge, England*

E. Tadmor, *University of Maryland, College Park, USA*

R. Temam, *Université Paris-Sud, France*

L. N. Trefethen, *University of Oxford, England*

Acta

Numerica

Volume 18

2009



CAMBRIDGE
UNIVERSITY PRESS

Published by the Press Syndicate of the University of Cambridge
The Pitt Building, Trumpington Street, Cambridge CB2 1RP
32 Avenue of the Americas, New York, NY 10013-2473, USA
10 Stamford Road, Oakleigh, Melbourne 3166, Australia

© Cambridge University Press 2009

First published 2009

Printed in Great Britain at the University Press, Cambridge

Library of Congress cataloguing in publication data available

A catalogue record for this book is available from the British Library

ISBN 978-0-521-192118

ISSN 0962-4929

Contents

Recent trends in the numerical solution of retarded functional differential equations	1
<i>A. Bellen, N. Guglielmi, S. Maset and M. Zennaro</i>	
Adaptivity with moving grids	111
<i>Chris J. Budd, Weizhang Huang and Robert D. Russell</i>	
Fast direct solvers for integral equations in complex three-dimensional domains	243
<i>L. Greengard, D. Gueyffier, P.-G. Martinsson and V. Rokhlin</i>	
Blow-up or no blow-up? A unified computational and analytic approach to 3D incompressible Euler and Navier–Stokes equations	277
<i>Thomas Y. Hou</i>	