

Reçu le 04 FEV. 1989

EXCLU DU PRÊT

Volume 12, Number 2, 1989

MATHEMATICAL AND COMPUTER MODELLING

(Formerly Mathematical Modelling)

Affiliated with the International Association for Mathematical and Computer Modelling

EDITORS-IN-CHIEF

Ervin Y. Rodin

Xavier J.R. Avula

Editorial Board

Rutherford Aris	N. Metropolis
H.T. Banks	William F. Miller
Martin Braun	D.N.P. Murthy
Roger W. Brockett	J.C.J. Nihoul
Colin W. Clark	James J. O'Brien
G.B. Dantzig	Hans Oestreicher
John U. Farley	Edward C. Posner
H. von Gierke	Ilya Prigogine
R. Glowinski	C.R. Rao
H.S. Green	Fred S. Roberts
Frank Harary	Robert Rosen
J.N.R. Jeffers	Gian-Carlo Rota
Rudolf E. Kalman	Thomas L. Saaty
Herbert Keller	Jerome Spanier
Murray S. Klamkin	Lynn Arthur Steen
M.D. Kruskal	T.J. Tarn
H. K. Kuiken	Samuel C.C. Ting
Roger E. Levien	Lotfi Zadeh
Simon A. Levin	O.C. Zienkiewicz
William F. Lucas	H.-J. Zimmerman



PERGAMON PRESS

MATHEMATICAL AND COMPUTER MODELLING

Affiliated with the International Association for Mathematical and Computer Modelling

VOLUME 12, NUMBER 2

1989

CONTENTS

- I. Kramer, J. A. Yorke** and **E. D. Yorke** 129 The AIDS epidemic's influence on the gay contact rate from analysis of gonorrhoea incidence
- M. de la Sen** and **C. Gil-Aguirrebeitia** 139 A stable MRAC design for discrete plants with unmodelled dynamics
- R. J. Leichti** and **R. C. Tang** 153 Effect of creep on the reliability of sawn lumber and wood-composite I-beams
- B. L. McFarland** 163 The solution used in discretizing an integral equation for studying neutrophilia
- G. S. Gipson** 169 Determinantal Rayleigh–Ritz expressions for natural frequencies of sandwich panels with orthotropic face plates
- W. B. Walton** 181 Parameter estimation for nonlinear models—convergence, data and parameter uncertainty, and constraints on parameter changes
- H. Arsham, A. Feuerverger,**
D. L. McLeish, J. Kreimer
and **R. Y. Rubinstein** 193 Sensitivity analysis and the “what if” problem in simulation analysis
- K. Davey**
and **J. P. Montgomery** 221 Conjugate gradient acceleration techniques applied to electromagnetic scattering problems
- P. Sharma**
and **E. H. Dettmann** 227 Multiple equilibria in modeling open-lake algal dynamics
- 241 Mathematical Modelling Reports
- Educational Mathematical Modelling Modules*
- E. Y. Rodin, S. Loubert**
and **L. Mohr** 247 Continuous model of an epidemic

I *Software Survey Section*

WORK SAMP, contributed by Thu Pham-Gia;
MexBeam v1.06, contributed by Strategic Solutions Inc.

V Announcements

INDEXED IN Current Contents, Automat. Subject Citatin Alert, CABS, CompuMath, Citatin Index, Current Contents/Engng Technol. Appl. Sci., Math. Rev., INSPEC Database, Oper. Res. Mgmt Sci., SCISEARCH, Zentralblatt für Mathematik



PERGAMON PRESS

Oxford · New York · Beijing · Frankfurt · São Paulo · Sydney · Tokyo · Toronto

Printed in Great Britain by A. Wheaton & Co. Ltd, Exeter

ISSN 0895-7177