

# New books in APPLIED MATHEMATICS

## STABILITY OF CRITICAL EQUILIBRIUM STATES

L. G. Khazin, E. E. Shnol

Catherine Waterhouse translator

Arun V. Holden translation editor

This monograph is devoted to cases in which a linear approximation is insufficient to determine whether the equilibrium is stable or not. Among the novel features is an examination of all twenty of the critical cases for systems of low co-dimension and discussion of near critical cases. The stability of equilibrium states of Hamiltonian systems is also briefly discussed.

234x156mm 244pp June 1991

0-7190-2705-5 hbk £80.00

## NEUROCOMPUTERS AND ATTENTION

Volume I: Neurobiology, synchronisation and chaos

Volume II: Connectionism and neurocomputers

Arun V. Holden & Vitaly I. Kryukov eds

Volume I contains papers that consider modelling psychophysiological processes by neural networks, synchronisation, metastability and phase transition in neural networks, and the role of chaotic neural dynamic behaviour of the component model neurones. Volume II contains papers that deal with the behaviour of more abstract model neurones and aspects of the design of neurocomputer architectures.

234x156mm illustrated June 1991

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Volume II 525pp 0-7190-3456-6 hbk £65.00 tentative

## NONLINEAR CHEMICAL WAVES

Peter J. Ortoleva

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Luigi M. Ricciardi ed

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Tomasz Kapitaniak

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S. Gurbatov, A. Malakhov & A. Saichev

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