

Nonlinear Time Series and Chaos Vol. I

DIMENSION ESTIMATION AND MODELS

Editor

Howell Tong

*Institute of Mathematics and Statistics
University of Kent
U. K.*

 **World Scientific**
Singapore • New Jersey • London • Hong Kong

Published by

World Scientific Publishing Co. Pte. Ltd.

P O Box 128, Farrer Road, Singapore 9128

USA office: Suite 1B, 1060 Main Street, River Edge, NJ 07661

UK office: 73 Lynton Mead, Totteridge, London N20 8DH

DIMENSION ESTIMATION AND MODELS

Copyright © 1993 by World Scientific Publishing Co. Pte. Ltd.

All rights reserved. This book, or parts thereof, may not be reproduced in any form or by any means, electronic or mechanical, including photocopying, recording or any information storage and retrieval system now known or to be invented, without written permission from the Publisher.

For photocopying of material in this volume, please pay a copying fee through the Copyright Clearance Center, Inc., 27 Congress Street, Salem, MA 01970, USA.

ISBN 981-02-1353-0

Printed in Singapore.

CONTENTS

Foreword	v
A Review of the Theory and Estimation of Fractal Dimension <i>Colleen D. Cutler</i>	1
A Review of Some Limit Theorems of Markov Chains and Their Applications <i>K. S. Chan</i>	108
Nonlinear Modeling of Multivariate and Categorical Time Series Using Multivariate Adaptive Regression Splines <i>Peter A. W. Lewis & Bonnie K. Ray</i>	136
Threshold ARMA Processes in Continuous Time <i>Peter J. Brockwell</i>	170
Bilinear Time Series Models <i>Pham Dinh Tuan</i>	191