

Contents

Introduction.	1
Nonlinear Waves, Solitons and IST	
M.J. Ablowitz	5
Integrability – and How to Detect It	
B. Grammaticos and A. Ramani	30
Introduction to the Hirota Bilinear Method	
J. Hietarinta	95
Lie Bialgebras, Poisson Lie Groups and Dressing Transformations	
Y. Kosmann-Schwarzbach	104
Analytic and Asymptotic Methods for Nonlinear Singularity Analysis: a Review and Extensions of Tests for the Painlevé Property	
M.D. Kruskal, N. Joshi and R. Halburd	171
Bifurcations, Chaos, Controlling and Synchronization of Certain Nonlinear Oscillators	
M. Lakshmanan	206
Eight Lectures on Integrable Systems	
F. Magri	256
Bilinear Formalism in Soliton Theory	
J. Satsuma	297
Quantum and Classical Integrable Systems	
M.A. Semenov-Tian-Shansky	314
List of Participants	379