

Contents

Preface	vii
List of Special Session Participants	xi
Recurrence in the Korteweg–de Vries Equation? BEN HERBST, GARRET NIEDDU, and A. DAVID TRUBATCH	1
On the Location of the Discrete Eigenvalues for Defocusing Zakharov–Shabat Systems Having Potentials with Nonvanishing Boundary Conditions FRANCESCO DEMONTIS, CORNELIS VAN DER MEE, and FEDERICA VITALE	13
The Novikov–Veselov Equation: Theory and Computation RYAN CROKE, JENNIFER L. MUELLER, MICHAEL MUSIC, PETER PERRY, SAMULI SILTANEN, and ANDREAS STAHEL	25
Transverse Instability of Plane Wave Soliton Solutions of the Novikov–Veselov Equation RYAN CROKE, JENNIFER L. MUELLER, and ANDREAS STAHEL	71
Semiclassical Soliton Ensembles for the Focusing Nonlinear Schrödinger Equation: Recent Developments GREGORY D. LYNG	91
Relative-Periodic Elastic Collisions of Water Waves JON WILKENING	109
The Instabilities of Periodic Traveling Water Waves with Respect to Transverse Perturbations KATIE OLIVERAS and BERNARD DECONINCK	131
Relationships Between the Pressure and the Free Surface Independent of the Wave Speed KATIE OLIVERAS and VISHAL VISAN	157
Comparison of Five Methods of Computing the Dirichlet–Neumann Operator for the Water Wave Problem JON WILKENING and VISHAL VASAN	175