

## Contents

|   |         |
|---|---------|
| <i>Guest Editors' Preface</i> .....   | 3-4     |
| <b>STEFAN BERCEANU</b>  |         |
| <i>A Holomorphic Representation of the Semidirect Sum of Symplectic and Heisenberg Lie Algebras</i> ..... | 5-13    |
| <b>ALBERTO ENCISO AND DANIEL PERALTA-SALAS</b>  |         |
| <i>Electric Fields Created by Point Charges: Some Geometrical and Topological Results</i> .....           | 14-23   |
| <b>HELGE GLÖCKNER</b>   |         |
| <i>Fundamental Problems in the Theory of Infinite-Dimensional Lie Groups</i> .....                        | 24-35   |
| <b>KISHORE MARATHE</b>  |         |
| <i>Chern-Simons and String Theory</i> .....   | 36-47   |
| <b>KARL-HERMANN NEEB</b>  |         |
| <i>Lie Algebra Extensions and Higher Order Cocycles</i> .....   | 48-74   |
| <b>ROBERTO FERREIRO PÉREZ AND JAIME MUÑOZ MASQUÉ</b>  |         |
| <i>On the First Pontryagin Form of a Surface</i> .....  | 75-81   |
| <b>DAVID RADNELL AND ERIC SCHIPPERS</b>   |         |
| <i>A Complex Structure on the Moduli Space of Rigged Riemann Surfaces</i> .....                           | 82-94   |
| <b>MARTIN SCHLICHENMAIER</b>  |         |
| <i>Deformations of the Virasoro Algebra of Krichever- Novikov type</i> .....                              | 95-105  |
| <b>ARMEN SERGEEV</b>  |         |
| <i>Seiberg-Witten Equations and Pseudoholomorphic Curves</i> .....  | 106-117 |
| <b>CHRISTOPH WOCKEL</b>   |         |
| <i>Smooth Extensions and Spaces of Smooth and Holomorphic Mappings</i> .....                              | 118-126 |