

CONTENTS

Kimio UENO and Kanehisa TAKASAKI — Toda Lattice Hierarchy	1
Michio JIMBO and Tetsuji MIWA — Irreducible Decomposition of Fundamental Modules for $A_l^{(1)}$ and $C_l^{(1)}$, and Hecke Modular Forms	97
Takeshi KAWAZOE — Maximal Functions on Non-Compact, Rank One Symmetric Spaces — Radial Maximal Functions and Atoms	121
Kanehisa TAKASAKI — Initial Value Problem for the Toda Lattice Hierarchy	139
Kazuhiko AOMOTO — Configurations and Invariant Theory of Gauß-Manin Systems	165
Takashi AOKI — Symbols and Formal Symbols of Pseudo-Differ- ential Operators	181
Masatoshi NOUMI — Regular Holonomic Systems and their Mini- mal Extensions I	209
Toshinori ÔAKU — F-mild Hyperfunctions and Fuchsian Partial Differential Equations	223
Jiro SEKIGUCHI — Regular Holonomic Systems and their Mini- mal Extensions II — Application to the Multiplicity Formula for Verma Modules	243
Etsuro DATE — On a Calculation of Vertex Operators for $E_n^{(1)}$ ($n = 6, 7, 8$)	255
Takahiro KAWAI and H. P. STAPP — Infra-red Finiteness in Quan- tum Electro-Dynamics	263
Mikio SATO, Masaki KASHIWARA and Takahiro KAWAI — Micro- local Analysis of Theta Functions	267
Michihiko HASHIZUME — Geometric Approach to the Completely Integrable Hamiltonian Systems Attached to the Root Sys- tems with Signature	291
Toshio OSHIMA and Toshihiko MATSUKI — A Description of Dis- crete Series for Semisimple Symmetric Spaces	331
Toshio OSHIMA — Boundary Value Problems for Systems of Linear Partial Differential Equations with Regular Singulari- ties	391