

**Advanced Studies in Pure Mathematics 25**

**CR-Geometry and Overdetermined Systems**

**CONTENTS**

Takao AKAHORI — Deformation theory of CR-structures and its application to deformations of isolated singularities I	1
John BLAND and Thomas DUCHAMP — Deformation theory for the hyperplane line bundle on $P^1$	41
Dennis DeTURCK and Hubert GOLDSCHMIDT — Aspects of prescribing Ricci curvature	60
Charles L. EPSTEIN — Deformations of singularities, complex manifolds and CR-structures	85
Thomas GARRITY and Robert MIZNER — Vector-valued forms and CR geometry	110
Jacques GASQUI and Hubert GOLDSCHMIDT — The infinitesimal spectral rigidity of the real Grassmannians of rank two	122
James F. GLAZEBROOK and Duraiswamy SUNDARARAMAN — On deformations of self-dual vector bundles over quaternionic manifolds	141
Chong-Kyu HAN and Jae-Nyun YOO — A method of prolongation of tangential Cauchy-Riemann equations	158
Kengo HIRACHI and Gen KOMATSU — Invariant theory of the Bergman kernel	167
László LEMPert — Spaces of Cauchy-Riemann manifolds	221
Hing Sun LUK and Stephen S. T. YAU — Some remarks on compact strongly pseudoconvex CR manifolds	237
Kimio MIYAJIMA — Deformation theory of CR-structures and its application to deformations of isolated singularities II	247
Takeo OHSAWA — A report on isolated singularities by transcendental methods	276
Duong H. PHONG and Roberto SILVOTTI — The fusion matrix and the Verlinde loop operators in conformal field theory	285
Takeshi SASAKI, Keizo YAMAGUCHI and Masaaki YOSHIDA — On the rigidity of differential systems modelled on Hermitian symmetric spaces and disproofs of a conjecture concerning modular interpretations of configuration spaces	318
Nancy K. STANTON — Infinitesimal CR automorphisms	355
Hiroshi UMEMURA — Lie-Drach-Vessiot theory — Infinite dimensional differential Galois theory—	364
Jose M. VELOSO — Prolongation projection commutativity theorem	386
Sidney M. WEBSTER — A complex Frobenius problem	406