

Contents

COURSES OF LECTURES

M. Kuranishi:	
Local Geometry of Nondegenerate CR Structures	1
H. Rossi:	
Applications of Complex Analysis to Group Representations.	37
B. Shiffman and J. Sommese:	
Vanishing Theorems for Weakly Positive Vector Bundles	61
S.M. Webster:	
Real Submanifolds of \mathbb{C}^n and Their Complexifications	69

LECTURES

Al. Boggess:	
A Survey of Recent CR Extension Results	80
L. Brambila:	
Endomorphisms of Vector Bundles Over a Compact Riemann Surface	90
R. Ephraim:	
A Generalized Criterion for Equisingularity	96
M.A. Guest:	
Geodesics, Harmonic Maps, and The Yang-Mills Equations	102
M. Kalka:	
Deformations of Submanifolds and Vanishing Theorems	109
A. Markoe:	
Computerized Tomography and Complex Analysis	113
A. Nagel:	
Non-Isotropic Metrics on Boundaries of Domains of Finite Type.	126
M. Porter:	
Properties Related to Directional Convexity	136
J. Ramanathan:	
Harmonic Maps from Surfaces to The Complex Grassmann Manifolds	148

J. A. Seade:	
Vector Fields on Smoothings of Complex Singularities	152
M. J. Spurr:	
On the Genus of An Irreducible Component of the Zero Set of A Holomorphic One-Form	158
D. Sundararaman:	
Construction of The Normal Cartan Connection (d'après M. Kuranishi)	162
L. M. Tovar:	
Open Stein Subsets and Domains of Holomorphy in Complex Spaces	183