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Zixin Hou (Eds.)

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FOREWORD

The Nankai Institute of Mathematics held a Special Year in Geometry and Topology during the academic year 1986-1987. The program centered around invited series of lectures, listed on the next page. This volume contains several sets of notes from these lectures, along with articles submitted by the participants.

We would like to thank all the participants for their enthusiasm and cooperation. Our thanks are also due to those who offered courses in Fall 1986 which prepared the graduate students for the lectures. Finally, we wish to thank Mr. Zhang Shu-dong for smoothing the English of many articles.

For the editors,

Boju Jiang
Chia-Kuei Peng
Zixin Hou

June 1988

SERIES OF LECTURES
(in chronological order)

Fall 1986

| | |
|-----------------|---------------------------------------|
| S.S. Chern | Ten Lectures in Differential Geometry |
| R.J. Stern | Yang-Mills and 4-Manifolds |
| R.O. Wells, Jr. | Supermanifolds |

Spring 1987

| | |
|--------------|--|
| U. Simon | A Course on Affine Differential Geometry |
| R.L. Cohen | Immersions of Manifolds; Algebraic K-Theory and Groups of Diffeomorphisms of Manifolds |
| S. Murakami | Exceptional Simple Lie Groups and Related Topics in Recent Differential Geometry |
| W.S. Cheung | Exterior Differential Systems and Calculus of Variations |
| R.D. Edwards | Decomposition of Manifolds |
| N.H. Kuiper | Geometry in Curvature Theory and Tightness |
| J. Eells | Harmonic Maps between Spheres |
| R. Kirby | Topology of 4-Manifolds |
| P. May | Equivariant Homotopy Theory |
| R.S. Palais | Morse Theory |
| C.L. Terng | Geometry of Submanifolds |
| S. Helgason | Topics in Geometric Analysis; Lie Groups and Symmetric Spaces from a Geometric Viewpoint |
| R.F. Brown | Nielsen Fixed Point Theory and Parametrized Differential Equations |
| A. Granas | Fixed Point Theory and Applications to Analysis |
| S.Y. Cheng | Index of Minimal Hypersurfaces |

TABLE OF CONTENTS

| | |
|--|-----|
| 1. Thomas E. Cecil and S. S. Chern: Dupin Submanifolds in Lie Sphere Geometry. | 1 |
| 2. Chen Weihuan (陈维桓): The Mean Curvature of the Tubular Hypersurfaces in a Space of Constant Curvature. | 45 |
| 3. Chen Xiuxiong and Peng Chia-Kuei (陈秀雄、彭家贵): Deformation of Surfaces Preserving Principal Curvatures. | 63 |
| 4. Ralph L. Cohen and U. Tillmann: Lectures on Immersion Theory. | 71 |
| 5. Jiang Boju (姜伯驹): Surface Maps and Braid Equations I. | 125 |
| 6. Li An-Min (李安民): Affine Maximal Surface and Harmonic Functions. | 142 |
| 7. Li Bang-He and Tang Zizhou (李邦河、唐梓洲): Codimension 1 and 2 Immersions of Lens Spaces. | 152 |
| 8. Li Bang-He and Xu Tao (李邦河、徐涛): On Third Order Nondegenerate Immersions and Maps of S^1 in R^2 . | 164 |
| 9. Ma Zhisheng (马志圣): Complete Surfaces in H^3 with a Constant Principal Curvature. | 176 |
| 10. Shingo Murakami: Exceptional Simple Lie Groups and Related Topics in Recent Differential Geometry. | 183 |
| 11. Peng Chia-Kuei and Hou Zixin (彭家贵、侯自新): A Remark on the Isoparametric Polynomials of Degree 6. | 222 |
| 12. Shen Chunli (沈纯理): On the Holomorphic Maps from Riemannian Surfaces to Grassmannians. | 225 |

| | |
|---|-----|
| 13. Shen Yibing (沈一兵), | 235 |
| Stability of Totally Real Minimal Submanifolds. | |
| 14. Udo Simon: | 243 |
| Dirichlet Problems and the Laplacian in Affine Hypersurface Theory. | |
| 15. Tai Hsin-Sheng (戴新生), | 261 |
| A Class of Symmetric Functions and Chern Classes of Projective Varieties. | |
| 16. Wang Shicheng (王诗成), | 275 |
| Essential Invariant Circles of Surface Automorphisms of Finite Order. | |
| 17. Wu Yingqing (吴英青), | 286 |
| Jones Polynomial and the Crossing Number of Links. | |
| 18. Xiao Liang (肖良), | 289 |
| On Complete Minimal Surfaces with Parallel and Flat Ends. | |
| 19. Xin Yuan-Long (忻元龙), | 295 |
| Regularity of Harmonic Maps into Certain Homogeneous Spaces. | |
| 20. Yang Wenmao (杨文茂), | 306 |
| On Infinitesimal Deformations of Surfaces in E^3 . | |
| 21. Yu Yanlin (虞言林), | 322 |
| Local Expressions of Classical Geometric Elliptic Operators. | |
| 22. Yu Yanlin (虞言林), | 333 |
| Volume of Geodesic Balls. | |
| 23. Zhang Shaoping (张少平), | 339 |
| On Complete Minimal Immersions $\chi: \mathbb{RP}^2 - \{a, b\} \rightarrow \mathbb{R}^3$ with Total Curvature -10π . | |
| 24. Zhang Weiping (张伟平), | 351 |
| Local Atiyah-Singer Theorem for Families of Dirac Operators. | |