

Contents

Prologue	
Recent Progress on the Formation of Trapped Surfaces and Black Holes	
.....	JUNBIN LI 1
Notes on Weighted Kähler-Ricci Solitons	CHI LI 18
A Monge-Ampère Type Functional and Related Prescribing Curvature Problems	
.....	QI-RUI LI 62
The Obata Type Integral Identity and Its Application	
.....	DAOWEN LIN; XI-NAN MA; QIANZHONG OU 81
A Brief Survey on a Recent Generalization of Cohn-Vossen Inequality on Certain Kähler Manifolds	GANG LIU 111
A Brief Summary of the Recent Global Regularity for Monge-Ampère Equations	
.....	JIAKUN LIU 121
Isoparametric Submanifolds and Mean Curvature Flow	XIAOBO LIU 145
Isolated Singularities of the Yamabe Equation with Non-flat Metrics	
.....	JINGANG XIONG 181
The Optimal Exponent of Certain Moser-Trudinger Type Inequalities on Projective Manifolds	KEWEI ZHANG 189
Lower Bound of Modified K -energy on a Fano Manifold with Degeneration for Kähler-Ricci Solitons	LIANG ZHANG 210
Some Regularity Estimates of the Complex Monge-Ampère Equation	
.....	XI ZHANG 220
Topology of Surfaces with Finite Willmore Energy	JIE ZHOU 235
Finite Generation and the Kähler-Ricci Soliton Degeneration	
.....	ZIQUAN ZHUANG 245