

Prologue

I am delighted that the *Surveys in Geometric Analysis 2023* will be published soon. Geometric analysis has been a very important and active research field at the frontier of mathematics for the last few decades, and many important achievements have been made in this field. The development of geometric analysis has played a key role in establishing numerous basic theories and solving long-standing problems in mathematics. It is a field worthy of much continued explorations.

Since the late 1990s, Peking University has taken the lead in organizing the annual conference in geometric analysis with participations of universities and research institutions both domestically and internationally. Scholars from all over the country and also abroad gathered together to report and share their own research works and exchange their ideas and thoughts. These have greatly promoted the development of geometric analysis research in China. The articles in this volume are exemplary submissions from the 2023 Geometric Analysis Conference, showcasing the progress made by Chinese scholars, both domestic and overseas. Readers will find in this book an opportunity to quickly grasp current frontier problems in geometric analysis, acquaint themselves with the latest research methods and results, and find valuable references for further research.

This book is the seventh volume of collected papers published since the birth of the “Geometric Analysis Conference” nearly 26 years ago. We extend our sincere gratitude to Science Press for their support in the publication of these collected papers. We also express our heartfelt thanks to the supporters and organizers of the annual conferences over the years, especially Professor Yong He and his colleagues from Xinjiang Normal University, who organized the 2023 meeting, as well as to all our colleagues in the mathematical community.

I hope that readers will find both rewards and joy in this volume of collected

papers. I wish the research and the nurturing of talent in geometric analysis in China to reach even greater heights.

Gang Tian

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