Advanced Lectures in Mathematics
Volume 43

Proceedings of the Seventh International Congress of Chinese Mathematicians

Volume I

Companion to the volume
Proceedings of the Seventh International Congress of Chinese Mathematicians, *Volume II*

edited by

Lizhen Ji · Lo Yang · Shing-Tung Yau

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Editors:
Lizhen Ji (Department of Mathematics, University of Michigan)
Lo Yang (Institute of Mathematics, Chinese Academy of Sciences)
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The scene of opening ceremony

Prof. Shing-Tung Yau gave opening speech

Left to right: Prof. Shing-Tung Yau, Prof. Björn Engquist (the awardee of the International Cooperation Award), and Prof. Zhong-Ci Shi

Left to right: Prof. Shing-Tung Yau, Prof. Xi-Ping Zhu (the awardee of Chern Prize), and Prof. Lo Yang

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Prof. Edward Witten and Prof. Shing-Tung Yau

Left to right: Prof. Shing-Tung Yau, Prof. Yuefei Wang, Prof. Chunli Bai (President of CAS), and Prof. Yong Qiu (President of Tsinghua University)

Preface

Every three years, mathematicians of Chinese descent meet for five days to present their results on mathematics and related subjects. Traditionally, the first day of the meeting is organized by the Morningside Foundation, where the prestigious Morningside Awards, the Chern Award, and the International Cooperation Awards are given. In 2016, the International Congress of Chinese mathematicians (ICCM) was organized by the Morningside Center of Mathematics in cooperation with the Academy of Mathematics and Systems Science at Chinese Academy of Sciences. The ceremony was held in the Great Hall of the People in China. Nearly two thousand Chinese mathematicians from all over the world came to Beijing for this ceremony. Many outstanding mathematicians of non-Chinese descent also came and gave spectacular lectures. We are glad that a large number of speakers have been willing to write up their lectures, and we have finally collected these manuscriptsthrough the hard work of Guangqiang Tie, and others. These papers provide good insight into the current status of many subjects in mathematics. We are proud to present them collected here. We should like to thank all participants, and the Morningside Center of Mathematics, for making such an effort to make the ICCM meeting and the publication of its proceedings successful.

Lizhen Ji, Lo Yang and Shing-Tung Yau

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