## **Preface**

New-Year Workshop on Scientific Computing 2019, an Inspiring Forum in Chairman Mao's Hometown

New-Year Workshop on Scientific Computing 2019 is the second activity of the forum on scientific computing for young mathematicians, which was held in the last two days of 2018, in Xiangtan University in Chairman Mao's hometown—Xiangtan, Hunan Province, China. The first one was held just in the same dates of 2017. Xiangtan University was founded in 1958 according to Chairman Mao's instruction. Though being away from any super-cities, the university attained amazingly an excellent repute in its academic records. Particularly, mathematics is one of its most outstanding areas all over China. A dozen of famous mathematicians, such as Yaxiang Yuan, Jinchao Xu, and Xiangyu Zhou, were graduated from Xiangtan University.

There are many conferences, forums and workshops every year, in the name of academic events. These activities become a certain of burden due to frequent travel for some of us and irrelevant to enjoyable discussions on scientific problems. This workshop is one of them, while we are in the hope to make some changes. By choosing the special dates for the workshop, we welcome the sun of 2019 with new ideas and wish everyone a fruitful year.

To make the workshop an inspiring but relaxing circumstance for sharing ideas, the organizers are trying to introduce some new rules. Among the attendees of the workshop, only a small part will give a talk. The speakers are pre-requested to prepare their talk very carefully, since the question time is scheduled over enough for each talk. Additional to the question time after each talk, there is a quite long discussion session that everyone can speak freely on his/her thoughts on any mathematical issues, how to do his/her research, how to communicate with graduated students, and so on.

This special issue is devoted to this workshop. It is clear that the papers in this special issue are not focused on a particular topic. Only due to the workshop, the authors were reunited together in Xiangtan University, and the papers were collected together in this special issue. We hope and are actually doing our best to make the forum a regular and high-level activity.

We would like to take this opportunity to thank Professor Yunqing Huang to host the workshop. We owe all the local organizers and the volunteers, who have paid so much to make the workshop a beautiful memory. We thanks sincerely to the authors for their

substantive contributions, and we are grateful to all the reviewers who have contributed valuable time and expertise in reviewing the papers and substantially improving the quality of this special issue.

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