Preface

Special Issue Dedicated to Professor Tao Tang's 60th Birthday

With great joy and enthusiasm, we are proud to present this special issue of East Asian Journal on Applied Mathematics (EAJAM) in honor of Professor Tao Tang on the occasion of his sixtieth birthday. Professor Tang is one of the founding editors of EAJAM, who has made a great effort to make the journal a success. This special issue collects original papers by distinguished scholars from Professor Tang's close friends and collaborators. The topics of the papers span diverse research areas in scientific computing and applied mathematics, which are closely related to Professor Tang's significant contributions in many areas, including adaptive grid methods, spectral methods, computational fluid dynamics, and uncertainty quantification.

Professor Tang completed his bachelor's degree in mathematics in 1984 from Peking University and earned his doctor's degree in mathematics from the University of Leeds in 1989. After graduation, he taught at Simon Fraser University and obtained tenure there. In 1998, he moved to Hong Kong Baptist University (HKBU), and became a chair professor in 2003. He was the Head of the Department of Mathematics during 2005-2008, and the Dean of Science from 2011 to 2015, at HKBU. In 2015, he joined the Southern University of Science and Technology as its vice-president, and was appointed Provost in May 2018. He has been the president of BNU-HKBU United International College since 2019.

Professor Tang is widely known for his expertise in the fields of computational mathematics and computational fluid dynamics. His achievements have been recognized and acknowledged in numerous ways, including the Feng Kang Prize of Scientific Computing from the Chinese Academy of Sciences (2003), the Natural Science Award by the Ministry of Education of China (2007), and the National Natural Science Award of China (2016), being elected a Fellow of the Society for Industrial and Applied Mathematics (SIAM 2012), the American Mathematical Society (AMS 2017), and the China Society for Industrial and Applied Mathematics (CSIAM 2019). In 2018, he was invited to deliver an invited lecture at the International Congress of Mathematicians (ICM'18). He was elected a member of the Chinese Academy of Sciences in 2017.

Professor Tang has also made tremendous contributions to the scientific community by mentoring and supporting junior researchers, including his Ph.D. students, postdocs, visiting scholars, collaborators and colleagues; by involving in many important committees in academic societies, including Chinese Mathematical Society, CSIAM, SIAM, ICIAM, ICM and Hong Kong Mathematical Society; by involving in editorial committees for many journals, including SIAM Journal on Numerical Analysis (2002-2010), Journal of Computational Physics (2003-), Journal of Computational Mathematics (2006-2016), Mathematics of Computation (2006-2013), Journal of Scientific Computing (2006-), Communications in Computational Physics (2006-), EAJAM (2011-2018), Numerical Mathematics Theory, Methods and Applications (2016-) and SIAM Journal on Scientific Computing (2023-). He was the co-founding editor of a Chinese journal titled "Mathematical Culture", which had offered lively, readable, and appealing expositions on a wide range of mathematical topics since 2010.

Professor Tang has been a teacher, a mentor, a collaborator, and a very dear friend to many of us. His dedication, passion and intuition in research have had great influences on his students, postdocs, visiting scholars, and many other junior researchers.

Finally, we would like to thank all authors and referees for their contributions to make this special issue possible.

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