

Preface

This special volume is dedicated to our teacher S.-S. Chern in honor of his 110th birthday. It is based on the talks given at the conference “Chern: a Great Geometer of the 20th Century” held at Tsinghua University in Beijing, China, October 10–14, 2021.

The articles in this volume include: Caucher Birkar, “Boundedness and moduli of algebraic varieties”; Jean-Pierre Bourguignon, “Revisiting S.S. Chern’s article: The geometry of G-structures 55 years after its publication”; Bing-Long Chen and Xiping Zhu, “A survey on Yau’s uniformization conjecture”; Benson Farb, “Rigidity of moduli spaces and algebro-geometric constructions”; Jixiang Fu, “Introduction to a deformed hermitian Yang–Mills flow”; Daniel S. Freed and Andrew Nietzke, “3D spectral networks and classical Chern–Simons theory”; Kenji Fukaya, “Homological algebra and moduli spaces in topological field theories”; Kefeng Liu and Hao Xu, “Local scalar invariants of Kahler metric”; Nicolai Reshetikhin, “Periodic and open classical spin Calogero–Moser chains”; Bernard Shiffman and Steve Zelditch, “Stochastic Kahler geometry: from random zeros to random metrics”; S.-T. Yau, “Shiing-Shen Chern: As a great geometer of the 20th century”; Xiangyu Zhou, “Some recent results on multiplier ideal sheaves”.

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