## **Preface**

Welcome to The Seventh International Conference on Scientific Computing and Partial Differential Equations (SCPDE23), as organized by the Department of Applied Mathematics of The Hong Kong Polytechnic University.

It is our intention to organize a well-respected international conference series on scientific computing and partial differential equations in Hong Kong every three years. These conferences were well attended, by international experts in respective disciplines and were found highly successful in providing a forum for the exchange of ideas, and latest results within a multi-disciplinary setting. Many top scientists in scientific computing and partial differential equations, including academicians from America, Europe and China, attended the conferences and presented their research results. We would like to take this opportunity to thank all the speakers and participants for their support to the conference.

We are grateful to the members of Organizing Committee and Local Organizing Committee for their hard work. We are also grateful to the staff members of the Department of Applied Mathematics for their time and effort making this conference possible.

The Conference gratefully acknowledges the patronage of The Hong Kong Polytechnic University, and the financial support of CAS AMSS-PolyU Joint Laboratory of Applied Mathematics (JLab) and Beijing Normal University & Hong Kong Baptist University United International College (UIC).

We sincerely hope that SCPDE23 will enhance international collaboration between applied mathematicians and provide an opportunity for young researchers to learn the current state of the art in scientific computing and PDEs.

Finally, we hope all participants have a fruitful SCPDE23 in The Hong Kong Polytechnic University and wish all overseas participants an enjoyable stay in Hong Kong.

Zhonghua Qiao, Chi-Wang Shu, Tao Tang and Tong Yang Organizing Committee of SCPDE23

# Acknowledgements

We are very grateful for the support and contributions to SCPDE23 as given by

The Hong Kong Polytechnic University (PolyU)

Faculty of Science, PolyU

Department of Applied Mathematics, PolyU

CAS AMSS-PolyU Joint Laboratory of Applied Mathematics (JLab)

Beijing Normal University & Hong Kong Baptist University United International College (UIC)

We would also like to thank the staff members in the Department of Applied Mathematics who have worked together in handling the various arrangements related to the conference. Their assistance has been indispensable.

# **Organizing Committees**

## **Organizing Committee**

- Zhonghua Qiao (PolyU)
- Chi-Wang Shu (Brown University)
- Tao Tang (UIC)
- Tong Yang (PolyU)

## **Local Organizing Committee**

- Jianbo Cui (PolyU)
- Buyang Li (PolyU)
- Xiao Li (PolyU)
- Yanping Lin (PolyU)
- Zhian Wang (PolyU)
- Zhi Zhou (PolyU)

**Conference Highlights** 

**Conference Venue** 

The SCPDE23 will be held on the PolyU campus. Please refer to the campus

map. Please note that smoking is not allowed on the PolyU campus.

**Opening Ceremony** 

The opening ceremony will be held in N003 (Lecture Theatre) at 9: 00 in the

Monday morning of 22 May 2023.

**Registration & Reception & Information Desk** 

Registration desk will be set up outside N001 from 17:00-19:00 on 21 May

2023 and outside N003 from 8: 30 to 18: 00 on 22, 23, 24 and 25 May 2023. A

notice board will be available nearby the registration desk. Updated information and announcement about the conference will be posted on the

notice board.

**On-campus Internet Access** 

Desktop computers are available for internet access in room M302. The

helper can take you to M302.

Wi-Fi access is also provided from 22-26 May 2023. Please use the login

name and password listed below.

User: gstscpde

Password: Polyu2023

Remarks: Only SSID:PolyUWLAN can be used.

## Registered participants are entitled to:

- Attendance to all conference sessions
- Invitation to the welcome reception
- Invitation to the opening ceremony
- Invitation to the lunch and banquet
- Coffee breaks
- A free copy of the Conference Abstracts and Conference Programme

#### Lunch

Lunch will be provided to all registered conference participants. Lunch tickets are attached to your official conference name tag. Be sure to bring along your tickets when you attend the lunch. In addition, there are a number of cafeterias available on campus. Please refer to the on-campus cafeteria map.

The nearby Tsim Sha Tsui East area, which is within walking distance from PolyU, provides a variety of teahouse, restaurants and fast food services. Please refer to the map of TST East.

## **Banquet**

The Conference Banquet will be held on 25 May 2023 at 18:00 at SJ Cuisine (港品軒), 2/F Harbour Crystal Centre, Tsim Sha Tsui East. A banquet ticket is attached to your official conference name tag. Be sure to bring along your banquet ticket when you attend the banquet.

## **Group Photo**

Conference Group Photo will be taken on 22 May 2023 after the Opening Ceremony at the staircase at Core P. Please refer to the campus map.

# **Conference Venue**

#### 21st May 2023

Registration Desk will open from 17:00-19:00 Outside N001, PolyU

Welcome Reception: 18:00-19:00

Outside N001, PolyU

 $22^{nd}$ ,  $23^{rd}$ ,  $24^{th}$ ,  $25^{th}$  and  $26^{th}$  May 2023

Opening Ceremony: N003

Registration & Information Desk: outside N003 (8:30-18:00)

Plenary Talks: N003

Parallel Sessions: N002, N003

Networked Computer Service: M302 (9:00-18:00)

Lunch (22, 23, 24, 25 May)

Ju Yin House Restaurant, 4/F, Communal Building

25th May 2023

Banquet: 18:00-21:00

SJ Cuisine (港晶軒), 2/F Harbour Crystal Centre, Tsim Sha Tsui East