

The 19th East Asia Section of SIAM Annual Meeting



EASIAM

Annual Meeting 2026

Program Book

AUGUST 23^{SUN} ~ 27^{THU}, 2026

ORIENTAL HOTEL, JEJU ISLAND, KOREA



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About EASIAM

History

Back in January 1998, when SIAM's former president, Professor Gilbert Strang, visited the National University of Singapore, he discussed with Professors Louis Chen, Seng-Luan Lee, and Shui-Nee Chow the possibility of setting up an East Asia SIAM section. The section, named East Asia SIAM (EASIAM), was officially established in December 1998, with Professor Seng-Luan Lee serving as the chairman. Professor Zhong-Ci Shi of the Chinese Academy of Sciences took over the chairmanship in 2001.

Purpose

To promote:

- ✓ The application of mathematics to science, engineering, and technology in East and Southeast Asia
- ✓ Basic research and education in mathematics that support applications in science and technology in the region
- ✓ Multidisciplinary research in science and engineering involving mathematics.

Activities



To organize international meetings for postgraduate students in mathematics, science, and engineering.



To organize advanced seminars in applied mathematics and scientific computing.



To provide opportunities for interaction between mathematicians and users of mathematics.

Region

East and Southeast Asia.

Since 1998, EASIAM has connected researchers across East and Southeast Asia, building a regional community in industrial and applied mathematics through annual meetings, advanced seminars, and its journal.



Committees

EASIAM Officers

President	Tao Zhou Chinese Academy of Sciences
Vice-President	Zhiwen Zhang University of Hong Kong
Vice-President	Minseok Choi POSTECH
Secretary	Xiliang Lu Wuhan University

Advisory Committee

Tao Tang BNU-HKBU United International College
Ming-Chih Lai National Yang Ming Chiao Tung University
Hisashi Okamoto Gakushuin University
Yongwimon Lenbury Mahidol University
Hyung-Chun Lee Ajou University
Zhijian (Jerry) Yang Wuhan University

Executive Committee

Malcolm Anderson Universiti Brunei Darussalam
Weiyang Zheng Chinese Academy of Sciences
Shing-Yu Leung Hong Kong University of Science & Technology
Zhonghua Qiao The Hong Kong Polytechnic University
Sri Redjeki Pudjaprasetya Bandung Institute of Technology
Ikha Magdalena Bandung Institute of Technology
Hiroshi Fujiwara Kyoto University
Yoshinobu Kawahara Osaka University
Hee-Dae Kwon Inha University
Myungjoo Kang Seoul National University

Guanghai Hu	University of Macau
Siu-long Lei	University of Macau
Fatimah Abdul Razak	National University of Malaysia
Angelyn Lao	De La Salle University
Hui Ji	National University of Singapore
Weizhu Bao	National University of Singapore
Tsung-Ming Huang	National Taiwan Normal University
Matthew M. Lin	National Cheng Kung University
Somkid Amornsamankul	Mahidol University
Duangkamon Baowan	Mahidol University

Local Chairs

Minseok Choi	POSTECH
Taeyoung Ha	NIMS
Jae-Hun Jung	POSTECH

Local Organizing Committee

Sehun Chun	Yonsei University
Youngjoon Hong	Seoul National University
Jinwoo Jang	POSTECH
Hyeonseong Jin	Jeju National University
Hyea Hyun Kim	Kyung Hee University
Jinsu Kim	POSTECH
Seungchul Lee	KAIST
Jae-Hyuk Lim	Kyung Hee University
Hyunseok Oh	GIST
Noseong Park	KAIST
Jaemin Shin	Chungbuk National University

Plenary & Invited Speakers

Plenary Speakers



Shi Jin
Shanghai Jiaotong
University

*Quantum Computations of
nonlinear PDEs and the
UnitaryLab Software*

Mon., Aug. 24 · 08:30-09:20 · Room H



Myungjoo Kang
Seoul National
University

*Deep Learning-Based Surface
Reconstruction from
Point Clouds*

Wed., Aug. 26 · 08:30-09:20 · Room H

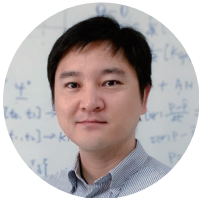


Carol S. Woodward
Lawrence Livermore
National Laboratory

*Adaptive Time Integration
Methods, Software, and
Applications*

Tue., Aug. 25 · 08:30-09:20 · Room H

Invited Speakers



Guanghui Hu
University of Macau

*Towards extreme efficiency:
numerical methods for PDEs in AI era*
Tue., Aug. 25 · 14:40-15:20 · Room H



Kenji Kajiwara
Kyushu University

*Geometric Shape Generation:
Integrability, Artisticity and
Mechanical Optimality*
Tue., Aug. 25 · 14:00-14:40 · Room H



Mikyoung Lim
KAIST

*Direct and inverse problems for
inclusions via layer potentials*
Wed., Aug. 26 · 14:40-15:20 · Room H



Te-Sheng Lin
National Yang Ming Chiao
Tung University

*Structure-Aware Scientific Machine
Learning for Interface Problems*
Mon., Aug. 24 · 14:00-14:40 · Room H



Zhenli Xu
Shanghai Jiaotong
University

*Machine-Learning Interatomic
Potentials for Long-Range Systems*
Mon., Aug. 24 · 14:40-15:20 · Room H



Zhi Zhou
The Hong Kong Polytechnic
University

*The Parareal Algorithm Revisited:
Toward Parallel-in-Time Integration*
Wed., Aug. 26 · 14:00-14:40 · Room H

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Sessions

303

Talks

45

Posters

16

Countries

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Plenary
Lectures

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Invited
Talks

39

Mini-
Symposia

7

Contributed
Talk Sessions

5

Student-Chapter
Sessions

Programme at a Glance

Day 0 Sunday, August 23

Time	Details	Location
16:00–20:00	Conference Registration	2F Lobby
18:00–20:00	Welcome Reception	Room I

Day 1 Monday, August 24

Time	Details	Location
08:00–18:00	Conference Registration	2F Lobby
08:10–08:30	Opening Ceremony <i>Remarks : Tao Zhou, Carol S. Woodward, Youngmok Jeon, Yunsung Choi</i>	Room H
08:30–09:20	Plenary Lecture 1 Speaker: Shi Jin Quantum Computations of nonlinear PDEs and the UnitaryLab Software	Room H
09:20–09:50	Group Photo & Coffee Break	
09:50–11:10 5 parallel	MS06A Locally Conserved and Structure-Preserving Numerical Algorithms for Partial Differential Equations Organizer: Shuyu Sun	Room H1
	MS32A Uncertainty Quantification and Mathematical Foundations of Deep Learning: Recent Advances in Methods, Theory, and Applications Organizer: Jiahua Jiang	Room H3
	MS27A Propagation, Patterns, and Spatiotemporal Heterogeneity in Reaction–Diffusion Models for Biology Organizer: Xiaoqing He	Room S1
	MS18A Recent Advances in Computational Science with Machine Learning Organizer: Seungchan Ko	Room S2
	CT01 High-Order and Structure Preserving Numerical PDE Methods Chair: Jaemin Shin	Room I1
11:10–11:20	Break	
11:20–12:40 5 parallel	MS06B Locally Conserved and Structure-Preserving Numerical Algorithms for Partial Differential Equations Organizer: Shuyu Sun	Room H1
	MS32B Uncertainty Quantification and Mathematical Foundations of Deep Learning: Recent Advances in Methods, Theory, and Applications Organizer: Jiahua Jiang	Room H3
	MS27B Propagation, Patterns, and Spatiotemporal Heterogeneity in Reaction–Diffusion Models for Biology Organizer: Xiaoqing He	Room S1

Day 1 | Monday, August 24

Time	Details		Location
11:20-12:40 5 parallel	MS18B	Recent Advances in Computational Science with Machine Learning Organizer: Seungchan Ko	Room S2
	MS01	Recent Progress in Partial Differential and Difference Equations Organizer: Takiko Sasaki	Room I1
12:40-14:00	Lunch		
14:00-14:40	Invited Talk 1	Speaker : Te-Sheng Lin Structure-Aware Scientific Machine Learning for Interface Problems	Room H
14:40-15:20	Invited Talk 2	Speaker : Zhenli Xu Machine-Learning Interatomic Potentials for Long-Range Systems	Room H
15:20-15:50	Coffee Break		
15:50-17:10 6 parallel	MS12A	Numerical PDEs for scientific machine learning and the vice versa Organizer: Hyea Hyun Kim	Room H1
	MS14A	New developments in numerical verification and analysis for nonlinear problems Organizer: Tomoyuki Miyaji	Room H3
	MS38A	Multiscale modeling and numerical methods for multiphysics materials Organizer: Luchan Zhang	Room S1
	MS03A	Numerical analysis and applications of nonlocal models Organizer: Xiaobo Yin	Room S2
	MS24A	High Order Numerical Methods: Design, Analysis, and Applications Organizer: Xinghui Zhong	Room I1
	SPP	Student Paper Prize (SPP)	Room M
17:10-17:20	Break		
17:20-18:40 5 parallel	MS12B	Numerical PDEs for scientific machine learning and the vice versa Organizer: Hyea Hyun Kim	Room H1
	MS14B	New developments in numerical verification and analysis for nonlinear problems Organizer: Tomoyuki Miyaji	Room H3
	MS38B	Multiscale modeling and numerical methods for multiphysics materials Organizer: Luchan Zhang	Room S1
	MS03B	Numerical analysis and applications of nonlocal models Organizer: Xiaobo Yin	Room S2
	MS24B	High Order Numerical Methods: Design, Analysis, and Applications Organizer: Xinghui Zhong	Room I1

Day 2 Tuesday, August 25

Time	Details	Location
08:00–18:00	Conference Registration	2F Lobby
08:30–09:20	Plenary Lecture 2 Speaker: Carol S. Woodward Adaptive Time Integration Methods, Software, and Applications	Room H
09:20–09:50	Coffee Break	
09:50–11:10 5 parallel	MS21A Recent developments in sampling methods, uncertainty quantification, and generative AI Organizer: Zhiwen Zhang	Room H1
	MS20A Topological data analysis and machine learning Organizer: Jae-Hun Jung	Room H3
	MS15A Numerical Methods for Semiconductor Device Simulation Organizer: Donghang Zhang	Room S1
	MS13 Numerical Optimization and Related Applications Organizer: Mei-Heng Yueh	Room S2
	MS23 Recent Advances in Modeling and Numerical Methods for Interface Problems Organizer: Yu-Hau Tseng	Room I1
11:10–11:20	Break	
11:20–12:40 6 parallel	MS21B Recent developments in sampling methods, uncertainty quantification, and generative AI Organizer: Zhiwen Zhang	Room H1
	MS20B Topological data analysis and machine learning Organizer: Jae-Hun Jung	Room H3
	MS15B Numerical Methods for Semiconductor Device Simulation Organizer: Donghang Zhang	Room S1
	MS08A Recent advances in analysis and numerical methods for wave scattering problems Organizer: Tao Yin	Room S2
	MS19A Recent Advances in Matrix Factorization: Theory and Algorithms Organizer: Jie Meng	Room I1
	CT04 Mathematical Biology, Reaction Networks, and Collective Dynamics Chair: Hyeonki Park	Room M
12:40–14:00	Lunch	

Day 2 | Tuesday, August 25

Time	Details	Location
14:00-14:40	Invited Talk 3 Speaker : Kenji Kajiwara Geometric Shape Generation: Integrability, Artisticity and Mechanical Optimality	Room H
14:40-15:20	Invited Talk 4 Speaker : Guanghui Hu Towards extreme efficiency: numerical methods for PDEs in AI era	Room H
15:20-15:50	Coffee Break	
15:50-17:10 6 parallel	MS10 Modeling Health and Disease in the Age of AI Organizer: Eunha Shim	Room H1
	MS36 Machine Learning Methods for Stochastic Dynamics Organizer: Li Zeng	Room H3
	CT02 Kinetic Equations, Complex Fluids, and Vortex Dynamics Chair: Jinwoo Jang	Room S1
	MS08B Recent advances in analysis and numerical methods for wave scattering problems Organizer: Tao Yin	Room S2
	MS19B Recent Advances in Matrix Factorization: Theory and Algorithms Organizer: Jie Meng	Room I1
	CT-Student-Chapter A Optimization, Optimal Transport, and Learning Dynamics Chair: Yihao Xu	Room M
17:10-17:20	Break	
17:20-18:40	Poster Session	Room S
18:40 ~	Conference Banquet	Room H & I

Day 3 Wednesday, August 26

Time	Details	Location
08:00–18:00	Conference Registration	2F Lobby
08:30–09:20	Plenary Lecture 3 Speaker: Myungjoo Kang Deep Learning-Based Surface Reconstruction from Point Clouds	Room H
09:20–09:50	Coffee Break	
09:50–11:10 6 parallel	MS04A Dispersive PDEs: Modeling, Analysis and Numerical Simulations Organizer: Yue Feng	Room H1
	MS25A Numerical Methods and Computational Modeling for Complex Physical Systems Organizer: Shuo Zhang	Room H3
	MS29A Recent advances on kinetic theory and continuum mechanics Organizer: Hiroshi Fujiwara	Room S1
	MS31A Low-Rank Tensor Approximation and Neural Sampling Methods for High-Dimensional Scientific Computing Organizer: Kejun Tang	Room S2
	CT07 Data-Driven Geometry, Imaging, and Materials Chair: Seungchul Lee	Room I1
	CT-Student -Chapter B Scientific Machine Learning and Data-Driven Inference Chair: Jungmin Lee	Room M
11:10–11:20	Break	
11:20–12:40 6 parallel	MS04B Dispersive PDEs: Modeling, Analysis and Numerical Simulations Organizer: Yue Feng	Room H1
	MS25B Numerical Methods and Computational Modeling for Complex Physical Systems Organizer: Shuo Zhang	Room H3
	MS29B Recent advances on kinetic theory and continuum mechanics Organizer: Hiroshi Fujiwara	Room S1
	MS31B Low-Rank Tensor Approximation and Neural Sampling Methods for High-Dimensional Scientific Computing Organizer: Kejun Tang	Room S2
	MS22 Learning-Based Scientific Computation: Theory, Algorithms, and Applications Organizer: Aiqing Zhu	Room I1
	CT-Student -Chapter C Mathematical Modeling and Numerical Methods for Dynamical Systems Chair: Yuntong Huang	Room M

Day 3 | Wednesday, August 26

Time	Details	Location
12:40-14:00	Lunch	
14:00-14:40	Invited Talk 5 Speaker : Zhi Zhou The Parareal Algorithm Revisited: Toward Parallel-in-Time Integration	Room H
14:40-15:20	Invited Talk 6 Speaker : Mikyoung Lim Direct and inverse problems for inclusions via layer potentials	Room H
15:20-15:50	Coffee Break	
15:50-17:10 6 parallel	MS09A Advances in Computational Mathematics and Machine Learning for Scientific Computing Organizer: BingZe Lu	Room H1
	MS28A Geometric Shape Generation I Organizer: Yoshiki Jikumaru	Room H3
	MS39 PINNs and AI Agents for Engineering Applications Organizer: Hyunseok Oh	Room S1
	MS30 Non-linear Wave Phenomena: From Quantum Interactions to Stochastic and Transonic Flows Organizer: Ying-Chieh Lin	Room S2
	CT05 Discrete Dynamics, Combinatorics, and Optimization Chair: Youngjoon Hong	Room I1
	CT-Student -Chapter D Phylogenetic Networks and Topological Data Analysis Chair: Shunsuke Maeda	Room M
17:10-17:20	Break	
17:20-18:40 6 parallel	MS09B Advances in Computational Mathematics and Machine Learning for Scientific Computing Organizer: BingZe Lu	Room H1
	MS28B Geometric Shape Generation I Organizer: Yoshiki Jikumaru	Room H3
	MS26 Bridging AI and Scientific Computing Organizer: Cheng Yuan	Room S1
	MS11 Statistical Learning for Inverse Problem: Methodologies and Applications Organizer: Hongqiao Wang	Room S2
	MS17 Verified and High-Performance Numerical Computation: Nonlinear Problems, Iterative Methods, and Matrix Multiplication Emulation Organizer: Katsuhisa Ozaki	Room I1
	CT-Student -Chapter E Numerical Analysis, Linear Algebra, and Inverse Problems Chair: Cheng Zilan	Room M

Day 4 Thursday, August 27

Time	Details	Location
08:00–18:00	Conference Registration	2F Lobby
08:30–09:50 5 parallel	CT06 Special Functions, Nonlocal Problems, and Wave Equations Chair: Dongwook Shin	Room H1
	MS02A Recent Topics in Applied Mathematics and Computation Organizer: Peter Chang-Yi Weng	Room H3
	MS07A Mathematics and AI for Scientific Computing Organizer: Yuqing Li	Room S1
	MS34 High-Order Numerical Methods for Hyperbolic Conservation Laws Organizer: Jiayi Gu	Room S2
	MS37 Numerical Methods for Phase-Field Models: Advances, Challenges and Applications Organizer: Chaoyu Quan	Room I1
09:50–10:20	Coffee Break	
10:20–11:40 5 parallel	MS05A Recent Advances in AI for Scientific Computing Organizer: Jinsil Lee	Room H1
	MS02B Recent Topics in Applied Mathematics and Computation Organizer: Peter Chang-Yi Weng	Room H3
	MS07B Mathematics and AI for Scientific Computing Organizer: Yuqing Li	Room S1
	MS16A Recent Advances in Numerical Shape and Topology Optimization Methods: From Theory to Practice Organizer: Wei Gong	Room S2
	MS35A Fast Solvers for Multiphysics Problems Organizer: Shihua Gong	Room I1
11:40–11:50	Break	
11:50–13:10 5 parallel	MS05B Recent Advances in AI for Scientific Computing Organizer: Jinsil Lee	Room H1
	CT03 Scientific Machine Learning for Differential Equations and Multiscale Computing Chair: Jae-Hyuk Lim	Room H3
	MS33 Geometric Shape Generation II Organizer: Joseph Cho	Room S1
	MS16B Recent Advances in Numerical Shape and Topology Optimization Methods: From Theory to Practice Organizer: Wei Gong	Room S2
	MS35B Fast Solvers for Multiphysics Problems Organizer: Chupeng Ma	Room I1
13:10–13:30	Closing & Awards	Room H
14:20 ~	Excursion	

About Jeju Island

- | | |
|--------------------|--|
| Dolharubang | Carved from volcanic basalt, these guardian figures once stood at village gates. |
| Haenyeo | Women who free-dive without oxygen. Their culture is inscribed on the UNESCO list of Intangible Cultural Heritage. |
| Lava Tubes | Jeju Volcanic Island and Lava Tubes were designated a UNESCO World Heritage Site in 2007. |
| Hallasan | At 1,947 m, Korea's highest peak rises at the island's center. |
| Tangerines | Jeju's signature fruit, ripened through the island's mild winters. |

Venue & Practical Information

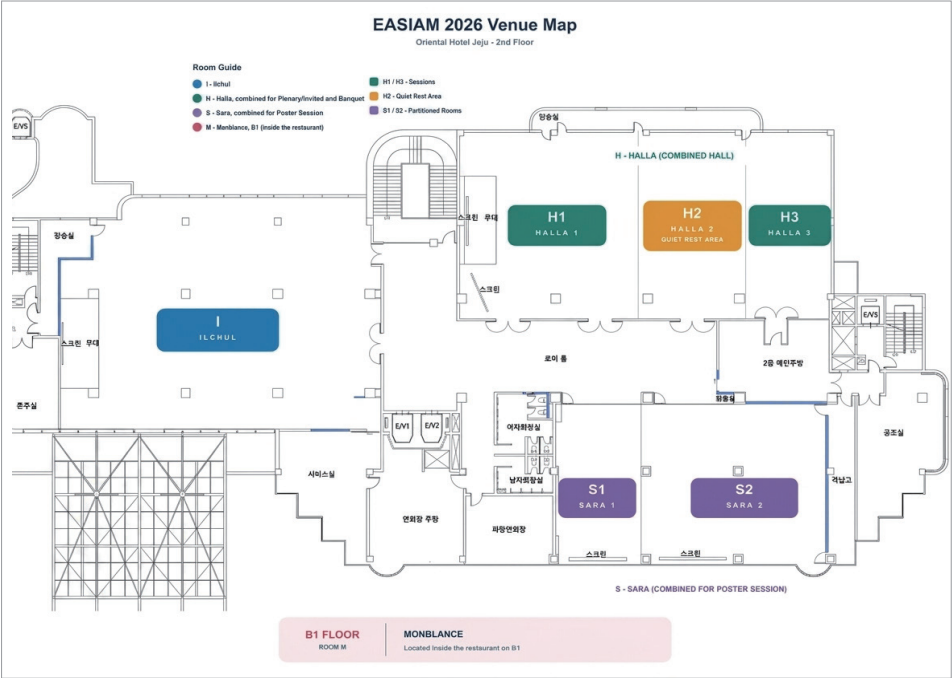
Venue



Oriental Hotel, Jeju Island, Korea
47 Tapdong-ro, Jeju-si, Jeju-do 63166, Republic of Korea
TEL +82-64-752-8222
WEB www.oriental.co.kr



Floor Plan



General Information

Registration	Wi-Fi
Location2F Lobby, in front of Room I HoursSunday, August 23 : 16:00–20:00 Monday–Thursday : 08:00–18:00	Room HHalla A / Halla B / Halla C Room SSara A / Sara B Room IIlchul A / Ilchul B / Ilchul C / Ilchul D
* Conference badges and materials will be available at the registration desk.	* Please avoid large file downloads and high-bandwidth streaming to ensure stable Wi-Fi access for all participants.

Shuttle Bus (A)

Jeju International Airport ↔ Oriental Hotel · Daily, August 23–27

Airport → Hotel	Hotel → Airport																								
<table><tr><th>Departure</th><th>Arrive</th></tr><tr><td>10:30</td><td>10:55</td></tr><tr><td>11:30</td><td>12:00</td></tr><tr><td>13:40</td><td>14:10</td></tr><tr><td>15:00</td><td>15:30</td></tr><tr><td>16:00</td><td>16:30</td></tr></table>	Departure	Arrive	10:30	10:55	11:30	12:00	13:40	14:10	15:00	15:30	16:00	16:30	<table><tr><th>Departure</th><th>Arrive</th></tr><tr><td>10:00</td><td>10:30</td></tr><tr><td>11:00</td><td>11:30</td></tr><tr><td>13:10</td><td>13:40</td></tr><tr><td>14:30</td><td>15:00</td></tr><tr><td>15:30</td><td>16:00</td></tr></table>	Departure	Arrive	10:00	10:30	11:00	11:30	13:10	13:40	14:30	15:00	15:30	16:00
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13:10	13:40																								
14:30	15:00																								
15:30	16:00																								

Boarding

Airport 3F (Departure Level), in front of Gate 5

Vehicle

Hyundai County, 20 seats

* Please arrive 5–10 minutes early. The vehicle cannot wait long at this location.
* Times are subject to change depending on traffic conditions.

More Information



For additional shuttle services and the latest schedule, please visit the conference website.
<https://easiam26.github.io/venue/>

Contact

Front Desk	+82-64-752-8222
Fire / Ambulance	119
Police	112
Conference Secretariat	easiam2026@gmail.com

Notes



The 19th East Asia Section of SIAM Annual Meeting

August 23–27, 2026 · Oriental Hotel, Jeju Island, Korea

Conference Secretariat easiam2026@gmail.com
easiam26.github.io

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