

Announcement and Call for Papers

IUTAM Symposium on Multiscale Architecting of Microstructures of Solids: Mechanics and Manufacture (MAMS-MM)

Website: <https://iutam2022-mams-mm.casconf.cn/>

26-28 June, 2022, Beijing, China

Dear colleagues,

Hereby we cordially invite you to participate in the **IUTAM symposium on Multiscale architecting of microstructures of solids: mechanics and manufacture (MAMS-MM)**. This symposium will be held at the **Institute of Mechanics, Chinese Academy of Sciences** in Beijing, China, from Sunday to Tuesday, **June 26 to 28, 2022**. The aim of MAMS-MM 2022 is to foster discussions on how to tailor the mechanical behaviour of solids via multiscale architected design and the corresponding manufacturing strategies to realize advanced structures with desired performance and functionality. Both **online and offline presentations** are welcome to accommodate the potential travelling difficulty of international speakers due to the COVID-19 pandemic.

MAMS-MM represents an area that becomes a major research field for the communities of mechanics, materials and applied physics. The MAMS-MM forum covers researches not only on designing structural materials with unprecedented mechanical properties, but also on efficient ways to realize such hierarchical structures. There are many fundamental issues that need to be examined through experiments, theoretical analysis and computer modelling. This symposium will act as a forum to bring multidisciplinary researchers together to exchange ideas, discuss key issues, and promote industrial technology development for commercial production and applications.

We warmly welcome and encourage scholars, engineers and students engaged in MAMS-MM to share their cutting-edge research advances at the symposium. Please access <https://iutam2022-mams-mm.casconf.cn/register> to sign up for an online account to submit your abstract (Opens from June 1, 2021). Submissions of abstracts of **presentations** and **posters** (a three-minute oral presentation with no more than 5 slides plus a poster) are welcome. **Abstract submission** is due on **March 31, 2022**, and notification of acceptance for an oral

presentation or poster will be sent out before April 10, 2022. More details about distinguished speakers are available online (<https://iutam2022-mams-mm.casconf.cn/>)

We eagerly look forward to seeing you at the MAMS-MM 2022 in Beijing!

General Topics

The symposium solicits talks, either theoretical or experimental, on the following topics but is not limited to,

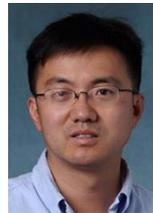
- heterogeneous solids
- hierarchical materials
- additive manufacturing for advanced solids
- multi-physics modelling and performance prediction on architected solids, etc.

Scientific Committee

Chairpersons



Yujie Wei
Institute of Mechanics,
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Harvard University, USA



Wei Yang
Institute of Applied
Mechanics and Center for
X-Mechanics, Zhejiang
University, China

Confirmed Speakers (In updating, as of 18 Feb 2022)

- **Huajian Gao**, School of Mechanical and Aerospace Engineering, College of Engineering, Nanyang Technological University, Singapore. <https://sites.brown.edu/gao-group-nanomechanics-engineering-biological-systems/home/prof-huajian-gao/>
- **Julia R. Greer**, Division of Engineering and Applied Sciences, California Institute of Technology, United States. <https://www.jrgreer.caltech.edu/>
- **Kun Zhou**, School of Mechanical and Aerospace Engineering, Nanyang Technological University, Singapore. <https://dr.ntu.edu.sg/cris/rp/rp00922>
- **Ting Zhu**, The George W. Woodruff School of Mechanical Engineering, Georgia Institute of Technology, United States. <https://www.zhugroup.gatech.edu/>
- **Horacio D. Espinosa**, McCORMICK School of Engineering, Northwestern University,

United States. <http://espinosa.mech.northwestern.edu/people/>

- **Dierk Rolf Raabe**, Max-Planck-Institut für Eisenforschung GmbH (MPG), Germany. <https://www.dierk-raabe.com/>
- **Teng Li**, Department of Mechanical Engineering, University of Maryland, United States. <http://lit.umd.edu/>
- **Pradeep Sharma**, Department of Mechanical Engineering, University of Houston, United States. <https://sharma.me.uh.edu/>
- **Taher Saif**, Department of Mechanical Science and Engineering, University of Illinois Urbana-Champaign, United States. <https://mechse.illinois.edu/people/profile/saif>
- **Carlos M. Portela**, Department of Mechanical Engineering, Massachusetts Institute of Technology, United States. <https://portela.mit.edu/>
- **Wei Yang**, Institute of Applied Mechanics and Center for X-Mechanics, Zhejiang University, China. <http://www.xmech.zju.edu.cn/>
- **Yueguang Wei**, College of Engineering, Peking University, China. <https://en.coe.pku.edu.cn/faculty/facultyaz/891213.htm>
- **Xiaolei Wu**, The State Key Laboratory of Nonlinear Mechanics, Institute of Mechanics, Chinese Academy of Sciences, China. <http://peopleucas.edu.cn/~xlwu>
- **Tongqing Lu**, School of Mechanics and Aerospace Engineering, Xi'an Jiaotong University. <http://gr.xjtu.edu.cn/web/tongqinglu>
- **Qi Ge**, Department of Mechanical and Energy Engineering, Southern University of Science and Technology, China. <https://faculty.sustech.edu.cn/geq/en/>
- **Yuntian Zhu**, Department of Materials Science and Engineering, City University of Hong Kong, Hongkong, China. <https://www.mse.ncsu.edu/zhu/>
- **Yong Yang**, Department of Mechanical Engineering, City University of Hong Kong, Hongkong, China. [https://scholars.cityu.edu.hk/en/persons/yong-yang\(6a19acf5-5636-4498-84c5-7726c4429c1e\).html](https://scholars.cityu.edu.hk/en/persons/yong-yang(6a19acf5-5636-4498-84c5-7726c4429c1e).html)
- **Jian Lu**, Department of Mechanical Engineering, City University of Hong Kong, Hongkong, China. <https://www.cityu.edu.hk/mne/jianlu/>
- **Hanqing Jiang**, School of Engineering, Westlake University, China. https://en.westlake.edu.cn/about/faculty/202106/t20210619_10897.shtml
- **Lei Lu**, Institute of metal research, Chinese Academy of Sciences, China. http://www.imr.cas.cn/yjtd/leilu_team/
- **Guozheng Kang**, School of Mechanics and Aerospace Engineering, Southwest Jiaotong University, China. <https://faculty.swjtu.edu.cn/kangguozheng/en/index.htm>
- **Biao Wang**, School of Physics, Sun Yat-Sen University, China. <http://ifcen.sysu.edu.cn/wangbiao.html ifcen/index.html>

Important Dates

- **1 Jun 2021**, Abstract submission opens
- **31 Mar 2022**, Abstract submission closes
- **10 Apr 2022**, Notification of acceptance
- **15 Apr 2022**, Registration opens
- **10 Jun 2022**, Full paper submission deadline (Optional)

Venue

Assembly hall of main building, Institute of Mechanics, Chinese Academy of Sciences
(CAS)

Address: Bei Si Huan Xi Rd #15, Haidian District, Beijing, China 100190

Sponsors



International Union of Theoretical and Applied Mechanics (IUTAM)



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