

Aeronautics and Astronautics Symposium of 2022 Silk Road International Conference on the Cooperation and Integration of Industry, Education, Research and Application

November 9, 2022, Xi'an China

Hosted by National Center for Schooling Development Programme

Supported by Ministry of Education of the People's Republic of China and The People's Government of Shaanxi Province

Organized by Northwestern Polytechnical University (Belt and Road Aerospace Innovation Alliance)

Co-organized by The Chinese Society of Aeronautical Education

| Opening Session | | | | | |
|--|--|------------------|---|---------------|--|
| Zhenghe Hotel, NPU Youyi Campus | | | | | |
| Meeting Platform: Webex; Meeting Number: 2517 949 8716; Meeting Code: 20221109 | | | | | |
| Time | Content | Speaker/Reporter | Organization | Online/Onsite | Host |
| 14:00-14:10 | NPU Introduction Video | | | | Prof. ZHANG Fuli, Director of Office of International Cooperation and Dean of International College, NPU |
| 14:10-14:15 | Welcome Address | Leader | Northwestern Polytechnical University | Onsite | |
| 14:15-14:20 | Welcome Address | Leader | Education Department of Shaanxi Provincial Government | Online | |
| 14:20-14:50 | Keynote Report: Business Opportunities and Screening criteria in Space Tourism | Jengshing Chern | Member of International Academy of Astronautics | Online | |
| 14:50-15:00 | Appointment of International Joint Supervisors | | | | |
| 15:00-15:20 | Group Photo | | | | |

Parallel Session 1: Aerospace Science Today: From Fundamental Research To Engineering Application

Zhenghe Hotel, NPU Youyi Campus

Meeting Platform: Webex; Meeting Number: 2517 949 8716; Meeting Code: 20221109

| Time | Report | Reporter | Organization | Online/Onsite | Host |
|-------------|--|-----------------|--|----------------------|--|
| 15:20-15:40 | Destination Space: A Brief Introduction of School of Astronautics at NPU | LI Yang | Professor, NPU School of Astronautics | Onsite | Associate Professor NIE Hongqi, NPU School of Astronautics |
| 15:40-16:00 | Aerospace Propulsion: Employing Detailed Chemical Kinetics | Henry Curran | Academician, Royal Irish Academy | Online | |
| 16:00-16:20 | Progress of Liquid Rocket Propulsion in the New Era | DU Feiping | Deputy Director, Science and technology department, 11 th branch of the Sixth Institute of Aerospace Science and Technology | Online | |
| 16:20-16:40 | Causation & Control of Flow-Induced LCOs: Contemporary Aerospace Designs | Adnan Maqsood | Professor, National University of Science and Technology of Pakistan | Online | |
| 16:40-17:00 | Technological Development of Solid Combined Propulsion | YANG Yuxin | Deputy Director, Xi'an Institute of Aerospace Power Technology | Online | |
| 17:00-17:20 | TBD | Daniele Botto | Professor, Politecnico di Torino, Italy | Online | |

Parallel Session 2: Recent Advances in Fluid-Structure Interaction and Aircraft

Zhenghe Hotel, NPU Youyi Campus

Meeting Platform: Zoom; Meeting Number: 926 7243 2206

| Time | Report | Reporter | Organization | Online/Onsite | Host |
|-------------|--|-----------------------|---|----------------------|--|
| 15:20-15:40 | TBD | Vladimir D. Bogatyrev | Rector, Samara University, Russia | Online | Associate Professor LI Yongbo, NPU School of Aeronautics |
| 15:40-16:00 | Development Status and Challenges of New Energy Electric Propulsion-based Aircrafts | ZHANG Weiwei | Deputy Dean, NPU School of Aeronautics | Onsite | |
| 16:00-16:20 | An overview of flight test techniques on C919 aircraft | DING Junliang | Deputy Chief Engineer, China Flight Test Establishment | Online | |
| 16:20-16:40 | Advances in highly efficient safety protection technologies for aircraft icing | HUANG Xiaobin | Professor, Shanghai Jiao Tong University | Online | |
| 16:40-17:00 | Numerical simulation and flight verification of degree of freedom flutter characteristics of flying wing | LV Binbin | Associate Scientist, China Aerodynamics Research and Development Center | Online | |
| 17:00-17:20 | Future challenges of flow induced vibration energy harvesting | Daniil Yurchenko | Associate Professor, University of Southampton, UK | Online | |

Parallel Session 3: Aerospace Power

Zhenghe Hotel, NPU Youyi Campus

Meeting Platform: Tencent; Meeting Number: 444 597 421

| Time | Report | Reporter | Organization | Online/Onsite | Host |
|-------------|---|---------------------------|--|----------------------|---|
| 15:20-15:40 | Efficient analysis of unsteady flows within a multi-stage turbomachine: from the time spectral method to the coupled time and passage spectral method | WANG Dingxi | Professor and Head of Department of Aeronautical Fluid Machinery, NPU School of Power and Energy | Onsite | Professor WANG Zhiwu, Deputy Dean of NPU School of Energy and Power |
| 15:40-16:00 | Effect of Channel Width on Fuel-Oxygen Mixing in an Unwrapped Rotating Detonation Engine | Gabriele Ciccarelli | Professor of Queen's University, Canada | Online | |
| 16:00-16:20 | Transpiration cooling | Akira Nakayama | Professor of Shizuoka University, Japan | Online | |
| 16:20-16:40 | Flight Experiment of Detonation Engine System by Using Sounding Rocket S-520-31 and Future Flight Experiment | Jiro Kasahara | Professor of Nagoya University, Japan | Online | |
| 16:40-17:00 | Fast, accurate and robust flutter analysis | Paul Petrie-Repar | Director and Co-founder of RPM Turbo, Australia | Online | |
| 17:00-17:20 | Experiments and simulations of premixed flame instability in a Hele-Shaw cell | Yakush Sergey Evgenievich | Director of Institute for Problems in Mechanics of the Russian Academy of Sciences | Online | |