

2023 INTERNATIONAL SYMPOSIUM ON THE PEACEFUL USE OF SPACE TECHNOLOGY – HEALTH November 18 - 20, 2023

# **Call for Papers**

The IPSPACE Organizing Committee invites academicians to attend and speak at the IPSPACE 2023. Papers are solicited in the areas listed below for the 2023 International Symposium on the Peaceful Use of space technology - Health (IPSPACE 2023), co-hosted by the International Academy of Astronautics (IAA), the International Astronautical Federation (IAF), the Association of Space Explorers (ASE), Space Foundation, Rice University's Baker Institute's International Space Medicine Summit (RICE ISMS), the International Space University (ISU), the George H. W. Bush Foundation for U.S.-China Relations, hosted by the International Peace Alliance (Space) (IPA), the Chinese Society of Astronautics (CSA), China High-Tech Industrialization Association (CHIA), China Association for Remote Sensing Applications (CARSA), China Electronics Chamber of Commerce (CECC). IPSPACE is organized by the International Peace Alliance (Space) (IPA) and the State-Guest Entrepreneur Club (SGEC). Strategic partners are China Communications Industry Association, GNSS & LBS Association of China, and China Chamber of Commerce for Import and Export of Machinery and Electronic Products (CCCME).

Similarly, to what was done in the previous symposiums, the program will focus on global peace, collaboration, and innovation. IPSPACE will be an online and in-person hybrid event in multiple locations around the world with 1 plenary session and 10 breakout sessions.

A broad theme of IPSPACE 2023 is peaceful use of space technology on human health with the slogan "One Space, One Home" will gather scientists, entrepreneurs, educators, scholars, and professionals in health, spatial IT, education, finance, insurance, energy and more. On 18 November 2023 the opening Ceremony will be followed by a plenary session and 10 breakout sessions. On 18-20 November 2023 topic areas for papers include:

## **Plenary Session**

The Plenary Session discusses peaceful applications and conversion of space technologies, innovation, talents, and other topics.

## **Session: Spatial IT and Applications**

Mankind faces major challenges such as environmental degradation, climate change, food security and public security. This session is expected to enhance global communication and cooperation to promote and deepen the application of spatial IT in major fields like resource management, environmental monitoring, disaster prevention and mitigation, thus, to further promote the peaceful use of space science and technology and make benefits for the well-being of mankind.

# **Session: Space Technology and Human Health**

This session will explore the intersection between space technology and human health. Topics of interest include space medicine, biotechnology, and bioengineering, as well as the use of space technology to monitor and improve human health on Earth.

# **Session: Space Power and Terrestrial Energy**

It is crucial to identify research, develop and deploy affordable and sustainable new energy sources. This need is driven by a demand for energy to enable economic growth for a still-increasing global population. It is also driven by concerns regarding the long-term accumulation in Earth's atmosphere of fossil fuel-derived greenhouse gases, and the prospect that annual production of petroleum will begin to decline. The challenge to transition current terrestrial energy systems into more environmentally friendly, sustainable ones is engaged. The whole range of power generation, conversion and storage will be discussed as well as the prospects for using space-based power plants to provide energy remotely to the Earth.

# **Session: Spatial IT for a Shared Future**

This session will explore the investment opportunities in the space industry and the potential for economic growth.

# Session: Space Education, Skills, and Talents

This session will introduce programs and discuss space education from a K12 student's perspective. Experienced educators will share their insights on how to make space education attractive and inspirational.

## **Session: Green Space Propulsion**

This Session will introduce distinctive environmental challenges for sub-orbital, Earth to orbit and in-space propulsion; Greener space propulsion in chemical and non-chemical rocket, liquid, solid and hybrid rocket systems; Promising green space propellants for various space missions; Advanced green propulsion systems for ramjet, scramjet, air-breathing, nuclear, electric, solar, and other advanced rocket systems.

## **Session: Moon Protection**

The Moon Farside is the only place free from radio transmissions and noises produced by ground-based And Earth-orbiting instruments. The spherical body of the Moon blocks them, acting like a shield. Thus, The Legal Protection of the Moon Farside from all kinds of non-scientific future exploitations (real estate, Industry, and military) has long been a concern for many scientists. This session advocates the support To the Moon Farside Protection by all scientists working in four different areas of science: Cosmology, Astrobiology, SETI, and Planetary Defense.

#### Session: Space Law (planned to be held on Nov. 11)

This session will examine the legal, ethical, and policy implications of space activities. It will explore the governance frameworks for space activities, including international treaties, laws, and industry standards.

# **Session: Commercial Space Development**

This session will focus on the latest developments in commercial spaceflight, space tourism, space mining, space manufacturing, and other commercial related topics.

# **ABSTRACT SUBMITTAL:**

Technical paper abstracts (250 to 500 words in length) in the areas described above or related to planetary defense will be accepted electronically through the conference email conference@iaamail.org beginning June 30, 2023. Please be sure to designate the topic area your paper addresses (see topics listed above). The deadline for receipt of abstracts is **October 31, 2023**.

#### **PAPERS:**

Full-length manuscripts or two-page extended abstracts are due by close of business on October 20, 2023. Revisions and corrections will be accepted within two weeks after the end of the conference. The format for papers is specified on the conference website. Accepted papers (including two-page extended abstracts and poster papers) will be published on the official conference proceedings. Full-length manuscripts may be considered for publication in a special edition of *Acta Astronautica*.

## **KEY DATES:**

June 30, 2023: Call for Papers

September 29, 2023: Abstract submission deadline

October 31, 2023: Final abstracts selected and invitations extended

November 5, 2023: Preliminary program available

November 17, 2023: Sign-in November 18-20, 2023: Symposium

#### **ORGANIZATIONAL STRUCTURE**

#### **Hosts**

Chinese Society of Astronautics (CSA)
China Electronics Chamber of Commerce (CECC)
China High-Tech Industrialization Association (CHIA)
China Association of Remote Sensing Application (CARSA)
Aircraft Owners and Pilots Association (AOPA)
International Peace Alliance (Space) (IPA)

#### **Co-hosts**

International Academy of Astronautics (IAA) International Astronautical Federation (IAF)

**Space Foundation** 

Association of Space Explorers (ASE)

International Space University (ISU)

Rice University's Baker Institute's International Space Medicine Summit (ISMS) George H.W. Bush Foundation for U.S.-China Relations (Bush China Foundation)

# Organizer

International Peace Alliance (Space) (IPA) State-Guest Entrepreneurs' Club (SGEC)

## **Strategic Partners**

China Communications Industry Association (CCIA)

GNSS & LBS Association of China (GLAC)

China Chamber of Commerce for Import & Export of Machinery & Electronic Products (CCCME)

#### Presidium

## **Honorary Chairs:**

Lin Zongtang, former minister of the China National Aerospace Industry

Liu Jiyuan, former Vice-President of International Academy of Astronautics (IAA), first president of the China National Space Administration

Neil Bush, Chairman of George H. W. Bush Foundation for U.S.-China Relations

George Abbey, Chairman of Rice University's Baker Institute's International Space Medicine Summit (ISMS), former Director of NASA Johnson Space Center (JSC)

Hiroki Matsuo, former Chairman of the Space Activities Commission, former Vice President of IAA, President of the Society for Promotion of Space Science

Roberto Battiston, former director of the Italian Space Agency (ASI), Chairman of the Scientific Committee of the New Space Economic Forum, Academician of the International Academy of Astronautics (IAA)

#### **Executive Chair:**

Wang Tianyi, Executive Chairman of the International Peace Alliance (Space), Academician of the International Academy of Astronautics (IAA), Executive Chairman of the International Innovation Research Institute (IIRI)

#### **Co-Chairs:**

Jean-Michel Contant, Secretary General of International Academy of Astronautics (IAA)

Wu Yansheng, President of Chinese Society of Astronautics, Academician of the International Academy of Astronautics (IAA)

Pascale Ehrenfreund, President of the International Space University (ISU), Board Member of Space Foundation

Yuan Jie, Deputy Director General of Chinese Society of Astronautics (CSA), Academician of the International Academy of Astronautics (IAA)

Christian Feichtinger, Executive Director of International Astronautical Federation (IAF), Academician of the International Academy of Astronautics (IAA)

Yang Baohua, Vice Chairman of the Chinese Academy of Astronautics, Academician of the International Academy of Astronautics (IAA)

Steve Eisenhart, Senior Vice President - Strategic & International Affairs, Space Foundation

Bao Weimin, Vice-Chairman of China Association for Science and Technology (CAST), Academician of Chinese Academy of Sciences (CAS), Academician of the International Academy of Astronautics (IAA)

Andy Turnage, Executive Director of Association of Space Explorers (ASE)

Yang Liwei, Taikonaut, Deputy Chief Designer of China Manned Space Agency (CMSA)

Oleg Orlov, Director of the Institute of Biomedical Problems at the Russian Academy of Sciences (IBMP), Academician of the International Academy of Astronautics (IAA)

Luo Ge, Director General of China Association of Remote Sensing Application (CARSA), Academician of the International Academy of Astronautics (IAA)

Wang Ning, President of China Electronics Chamber of Commerce

Liang Xiaohong, Executive Vice President of China High-Tech Industrialization Association (CHIA)

Wang Yiran, Vice President and Secretary-General of the Chinese Society of Astronautics (CSA)

Zhang Yujing, Chairman of China Chamber of Commerce for Import & Export of Machinery & Electronic Products (CCCME)

Ding Wenfeng, Co-Chair of the Special Fund for the Peaceful Use of Space Technology

William Zeckendorf, Owner, Founder and Co-Chairman of Zeckendorf Development, LLC.

Arthur Zeckendorf, Co-Chairman of Zeckendorf Development, LLC.

Wang Bingke, Chairman of China Communications Industry Association (CCIA)

Yu Xiancheng, Chairman of GNSS and LBS Association of China (GLAC)

Deng Yulin, President of the International Academy of Astronautics Life Sciences Commission, Chief Scientist of Institute of Engineering Medicine, Beijing Institute of Technology (BIT)

#### **Presidium Members**

Barbara Ghinelli, Director of Clusters and Campus Development at UKRI-Science and Technology Facilities Council (STFC)

Chen Cungen, Professor of Northwest A&F University, Guest Professor and doctoral supervisor at Northwest University

Cong Bin, Academician of Chinese Academy of Engineering, Professor and doctoral supervisor in forensics and pathophysiology

David Alexander OBE, Director of Rice Space Institute, professor of the department of physics and astronomy, Rice University

Dong Qingjiu, Vice Chairman and Secretary General, China Guanghua Foundation

Jean-Baptiste Desbois, Director General of Cité de l'espace, CEO of SEMECCEL

Jin Shuanggen, Vice President of Henan Polytechnic University, Member of the European Academy of Sciences

Lev Zelenyi, Member of the presidium of Russian Academy of Sciences, Academician of the International Academy of Astronautics (IAA)

Li Pumin, former Secretary-General of the National Development and Reform Commission (NDRC), China The Lord Grade of Yarmouth CBE, Chairman of OFCOM, Co-Chairman of CIIC McFaddens Holdings Ltd., former Chairman of the BBC

Nigel Little, Director at a North American company, previously head of U.K./Europe for large investment banks incl. Morgan Stanley, HSBC James Capel

Olivier Contant, Executive Director of the International Academy of Astronautics (IAA), Co-Editor of Acta Astronautica, Founding Director and President of the International Innovation Research Institute (IIRI)

Peng Heping, former Assistant President and Researcher of Renmin University of China

Wang Jianchang, Designated Chairman member of Chinese Medical Association and Chinese Society of Aerospace Medicine, Senior Doctor for Cardiovascular disease, Doctoral Supervisor

Weng Jingnong, Executive Director of Regional Centre for Space Science and Technology Education in Asia and the Pacific (China) (Affiliated to the United Nations), Director of APSCO Education and Training Center (China)

Jennifer Yu, Chairwoman of Rothschild & Co in Greater China

Zhang Jing'an, Vice Chairman of the China Center of the Eurasian Academy of Sciences, Member of the International Eurasian Academy of Sciences, Chairman of the China Society of Science and Technology Reform

Zhang Xing, Chief Executive Officer of Beijing Gao Hua Securities Co., Ltd.

Zhang Feng, President of Aircraft Owners and Pilots Association (AOPA) of China

#### **INTERNATIONAL PROGRAM COMMITTEE**

# **Director:**

Bao Weimin, Vice-Chairman of China Association for Science and Technology (CAST), Chairman of China High-Tech Industrialization Association (CHIA), Academician of Chinese Academy of Sciences (CAS), Academician of the International Academy of Astronautics (IAA)

#### **Executive Directors:**

Deng Yulin, President of the International Academy of Astronautics Life Sciences Commission, Chief Scientist of Institute of Engineering Medicine, Beijing Institute of Technology (BIT)

David Alexander OBE, Director of Rice Space Institute, professor of the Department of Physics and Astronomy, Rice University

Barbara Ghinelli, Director of Clusters and Campus Development at UKRI-Science and Technology Facilities Council (STFC)

#### Members:

Lev Zelenyi, Member of the presidium of Russian Academy of Sciences, Academician of the International Academy of Astronautics (IAA)

Jean-Baptiste Desbois, Director General of Cité de l'espace, CEO of SEMECCEL

Jin Shuanggen, Vice President of Henan Polytechnic University, Member of the European Academy of Sciences

Olivier Contant, Director of Innovation and New Technology at the International Academy of Astronautics (IAA), Founding Director of the International Innovation Research Institute (IIRI)

Wang Jinnian, Professor, School of Geography and Remote Sensing, Guangzhou University, Academician of the International Academy of Astronautics (IAA)

## **CONFERENCE WEBSITE:**

For more detailed information, please visit the IAA official website at <a href="https://iaaspace.org/ipspace">https://iaaspace.org/ipspace</a>

IPSPACE Secretariat International Innovation Research Institute (IIRI)

CONTACT:

Jill Lin: JillLynn23@outlook.com CC: JillLynn@foxmail.com