

On 23 July 2024, the International Workshop “**Key Issues on Manned Space and Deep Space Exploration**” was successfully kicked off in Beijing by the China Academy of Space Technology (CAST).

This workshop was preceded, earlier in March 2024, by the IAA study group “**Key Issues on Human Flight Deep Space Exploration**”, initiated by Academician Prof. YANG Hong from CAST and co-chaired by A. Coustenis. In order to include a worldwide representation of scientists and experts to carry out this study, CAST invited scientists from COSPAR to attend the aforementioned workshop, benefiting from the time proximity with the 2024 COSPAR General Assembly which had taken place the week before in Busan, South Korea. Dr. Athena Coustenis, Mr. Niklas Hedman, Dr. Pascale Ehrenfreund (COSPAR President), Prof. Bernard Foing (Vice-Chair of COSPAR Panel on Exploration), Prof. Livio Narici (Chair of COSPAR Sub-Commission F2), and Dr. Petra Rettberg (Vice-Chair of COSPAR Commission F), thus attended the Workshop and gave keynote lectures and interacted with the CAST scientists and engineers.

Members of the COSPAR Panel on Planetary Protection contributing to this workshop were: A. Coustenis (Chair), N. Hedman (Vice-Chair and COSPAR General Counsel), P. Rettberg, and Kanyan Xu (CAST). Mr. Mathieu Grialou representing CNES at the Beijing French Embassy, and six experts from CAST, led by Prof. YANG Hong, also attended and gave additional keynote lectures at the workshop.

The President of CAST, as well as the former Vice President of IAF (2023-2026), Dr. LI Daming gave the opening speeches welcoming all the scientists, experts and guests from COSPAR, IAA, CNES, CNSA, CAS, Macau University, CASC, CSA. Dr. Jean-Michel Contant, the IAA Secretary General also sent a video address for this workshop. All the lectures focused on key issues of robotic and crewed exploration of the solar system, including but not limited to leading-edge spacecraft techniques, biological regenerative life support system, radiation protection techniques for both astronauts and spacecraft, in situ resource utilization techniques, planetary protection policies and more. The lectures and the subsequent Q&A sessions invited a lot of interest in the audience and inspired discussion, insights and various exchanges on Manned Space and Deep Space Exploration which is a timely important topic.

The IAA Study Group is open to all the scientists and experts who share the same interest or concern and the insights and views on the related issues gathered and generated through this study group would be published by IAA, while the expertise and contributions of the COSPAR representatives was very much appreciated. This Workshop is scheduled to be followed by a series of such events in the coming years.

(Report by Yinan Zhang, CAST)