



**United Nations / Austria
Symposium on
“Space Science and the United Nations”**

Programme

**Austrian Academy of Sciences, Institute for Space Research
Schmiedlstrasse 6, Graz, Austria**

Co-sponsored by
City of Graz, State of Styria, Austrospace, European Space Agency
Committee on Space Research (COSPAR)
Austrian Ministry for Transport, Innovation and Technology
Austrian Academy of Sciences

22 – 24 September 2014

Honorary Committee (in alphabetical order):

S. Di Pippo	Director, Office for Outer Space Affairs, United Nations
L. A. Fisk	President, Committee on Space Research
S. Nagl	Mayor, City of Graz, Austria
F. Nordlund	Head of the International Relations Department, European Space Agency
I. Schädler	Deputy Director General for Innovation Policy, Austrian Ministry for Transport, Innovation and Technology
F. Voves	Governor, State of Styria, Austria

Programme Committee (in alphabetical order):

W. Balogh	Office for Outer Space Affairs, United Nations
W. Baumjohann	Space Research Institute, Austrian Academy of Sciences
J.-C. Bigot	European Space Agency
P. Ehrenfreund	Space Policy Institute, George Washington University
M. Fujimoto	Japan Aerospace Exploration Agency, Japan
K.H. Glassmeier	Committee on Space Research
H. Haubold	Office for Outer Space Affairs, United Nations (retired)
O. Koudelka	JOANNEUM RESEARCH and Graz University of Technology, Austria
P. Martinez	South African Astronomical Observatory, South Africa
J. Ortner	EURISY
M. Sharma	Department of State, United States of America
A. Yoshikawa	International Center for Space Weather Science and Education, Japan

Local Organizing Committee (in alphabetical order):

B. Flock	Austrian Academy of Sciences
A. Fuchs-Fehringner	Graz Tourism
N. Hofer	City of Graz
B. Kössler	JOANNEUM RESEARCH
O. Koudelka	JOANNEUM RESEARCH and Graz University of Technology, Austria
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Monday, 22 September 2014

Morning

8:30 **Registration**

9:00 **Opening Ceremony**

Chairperson: Simonetta Di Pippo, United Nations Office for Outer Space Affairs

9:00 Welcome / Opening Remarks

- *Wolfgang Baumjohann*
Austrian Academy of Sciences
- *Peter Piffel-Percevic, City of Graz*
- *Ingolf Schädler, Austrian Ministry for*
Transport, Innovation and Technology
- *Fabio Favata, European Space Agency*
- *Simonetta Di Pippo*
United Nations Office
for Outer Space Affairs

9:30 **Keynote Addresses**

9:30 ESA Space Science Activities *Fabio Favata*
ESA

10:00 Status of NASA Science *Allen Gale*
NASA

10:30 *Coffee/Tea Break*

Symposium Introduction

11:00 Space Science in the United Nations
Programme on Space Applications -
Introduction and Objectives of the Symposium *Werner Balogh*
United Nations Office for Outer Space Affairs

12:00 *Lunch*

Afternoon

13:30 **Session 1: Space Science and International Organizations**

Chairperson: Otto Koudelka, Graz University of Technology and JOANNEUM RESEARCH

13:30 Capacity Building through Basic Space Science *Rudolf Albrecht*
Austrian Space Forum

13:50 COSPAR Activities in Support of Capacity
Building in Space Science *Wolfgang Baumjohann*
COSPAR

14:10 ESO, born in Europe, at home in the World *Claus Madsen*
ESO

14:30	The European Space Sciences Committee	<i>Nicolas Walter European Science Foundation</i>
14:50	<i>Coffee/Tea Break</i>	
15:30	<u>Session 2: National and Regional Space Science Activities</u> <i>Chairperson: Johannes Ortner, EURISY</i>	
15:30	U.S. Space Studies Board Views on International Collaboration in Space Science	<i>Michael Moloney U.S. National Research Council U.S. National Academy of Sciences</i>
15:50	Introduction of Chinese Space Science International Cooperation	<i>Liu Bo CNSA, China</i>
16:10	Japan's Space Science Activities	<i>Masaki Fujimoto JAXA, Japan</i>
16:30	Space Science Activities in India	<i>Yogesh Kant ISRO, India</i>
16:50	Capacity Building in Space Science in Africa	<i>Peter Martinez South African Council for Space Affairs South Africa</i>
17:10	Review of Sessions 1 and 2 – Q&A and Discussions	<i>Symposium Participants</i>
18:00	<i>Transfer to the Hotel</i>	
19:00	<i>Transfer from the Hotel to the "Andreas-Hofer-Platz" (Centre of Graz)</i>	
19:30	<i>Reception hosted by the Mayor of the City of Graz Siegfried Nagl (Rathaus)</i>	

Tuesday, 23 September 2014

Morning

9:00	<u>Session 3: Space Science and the United Nations Basic Space Science Initiative</u> <i>Chairperson: Sergio Camacho-Lara, CRECTEALC, Action Team-14, Mexico</i>	
9:00	Telescopes Donation under International Scientific Optical Network (ISON) Project	<i>Igor Molotov Keldysh Institute of Applied Mathematics Russian Academy of Sciences</i>
9:15	International Scientific Optical Network (ISON) and UN BSSI – New Topical Goals for an Observing Programme	<i>Vladimir Agapov Keldysh Institute of Applied Mathematics Russian Academy of Sciences</i>

9:30	An International Response to the NEO Impact Threat – the Role of the United Nations	<i>Sergio Camacho-Lara CRECTEALC, Action Team-14 Mexico</i>
9:45	Space Science Capacity Building at the International Center for Space Weather Science and Education (ICSWE)	<i>Akimasa Yoshikawa ICSWE Japan</i>
10:00	The World Space Observatory Project	<i>Ana Ines Gomez de Castro Univ. Complutense de Madrid Spain</i>
10:15	World Space Observatory – Ultra Violet project	<i>Mikhail Sachkov Institute of Astronomy Russian Academy of Sciences</i>
10:30	Review of Session 3 – Q&A and Discussions	<i>Symposium Participants</i>
	<i>Coffee/Tea Break</i>	
11:00	<u>Session 4: Space Science Activities and the Possible Role of the United Nations</u> <i>Chairperson: Sergio Camacho-Lara, CRECTEALC, Action Team-14, Mexico</i>	
11:00	Astronomy and Space for Capacity Building	<i>George Miley IAU</i>
11:15	Science supporting Human Permanence on Mars	<i>Bas Lansdorp Mars One The Netherlands</i>
11:30	A Search for Microorganisms in the Earth's Atmosphere	<i>Jayant Vishnu Narlikar Inter-University Centre for Astronomy and Astrophysics (IUCAA), India</i>
11:45	Consequences of the Discovery of Extraterrestrial Life – Impact on Humanity	<i>Chandra Wickramasinghe Buckingham Centre for Astrobiology United Kingdom</i>
12:00	Mars Analog Research as a Catalyst for Citizen Science	<i>Gernot Grömer Austrian Space Forum Austria</i>
12:15	Review of Session 4 – Q&A and Discussions	<i>Symposium Participants</i>
12:40	<i>Lunch</i>	

Afternoon

13:30	<u>Guided Tour of the Institute of Space Research of the Austrian Academy of Sciences</u>	
15:00	<u>Session 5: National and Regional Examples of Space Science Capacity Building</u> <i>Chairperson: Peter Martinez, South African Council for Space Affairs, South Africa</i>	
15:00	The African Regional Centre for Space Science and Technology Education	<i>Oluremi Ayokunle Fashade ARCSSTE-E, Nigeria</i>
15:15	Space Science Education at the Regional Centre for Space Science and Technology Education for Western Asia	<i>Awni Kasawneh RCSSTE for Western Asia, Jordan</i>
15:30	Space Science and Capacity Building in Asia and the Pacific Region: CSSTEAP Initiatives	<i>Yogesh Kant CSSTEAP/ISRO, India</i>
15:45	Space Science in Mexico	<i>Benito Orozco Mexican Space Agency Mexico</i>
16:00	<i>Coffee/Tea Break</i>	
16:30	<u>Session 5 cont'd: National and Regional Examples of Space Science Capacity Building</u> <i>Chairperson: Peter Martinez, South African Council for Space Affairs, South Africa</i>	
16:30	Space Science Education in Nepal	<i>Suman Gautam Pokhara Astronomical Society Nepal</i>
16:40	Promoting Space Science in Nigeria	<i>Omowumi Oluwayemisi Alabi Nigeria</i>
16:50	Space Science and Astronomy Activities and Development in Ethiopia	<i>Solomon Belay Tessema Entoto Observatory and Space Science Research Center, Kotebe University Ethiopia</i>
17:00	Astronomy in Sri Lanka based on 45cm Cassegrain Telescope at Arthur C Clarke Institute for Modern Technologies (ACCIMT)	<i>Janaka Adassuriya Arthur C Clarke Institute for Modern Technologies (ACCIMT), Sri Lanka</i>
17:10	Capacity Building in Space Science and Technology in Ghana	<i>Benjamin Bonsu ANUC, Ghana</i>
17:20	An African School on Space Science	<i>Jean Uwamahoro University of Rwanda College of Education, Rwanda</i>
17:30	Review of Sessions 5 – Q&A and Discussions	<i>Symposium Participants</i>

- 18:00 *Transfer to the “Burgring” (Centre of Graz)*
- 18:30 *Guided Tour through the Old City*
- 19:30 *Reception hosted by the Governor of the State of Styria Franz Voves (Orangery in the Gardens of Graz Burg)*

Wednesday, 24 September 2014

Morning

9:00 Session 6: Specific Space Science Projects

Chairperson: Werner Balogh, United Nations Office for Outer Space Affairs

- 9:00 Space Environment Simulation and Research Infrastructure of China *Jianli Liu
Harbin Institute of Technology,
Heilongjiang, China*
- 9:15 Small Space Platform for Scientific and Technological Experiments *Nikolay Vedenkin, Valeriia Verkhoviykh
Dauria Aerospace
Russian Federation*
- 9:30 Bioregenerative Life Support Experiments in Chinese LUNAR PALACE 1: Results and Future Plans *Liu Hong
Beihang University
Beijing, China*
- 9:45 Review of Sessions 6 – Q&A and Discussions *Symposium Participants*

10:00 Session 7: Future Space Science Activities in the Framework of the United Nations

Chairperson: Werner Balogh, United Nations Office for Outer Space Affairs

- 10:00 Discussions on Future United Nations Space Science Activities *All Symposium Participants*
- 10:30 *Coffee/Tea Break*
- 11:00 Symposium Review, Observations and Recommendations for the Report *All Symposium Participants*
- 12:30 *Lunch*

Afternoon

13:30 Concluding Discussions and Symposium Closing Session

- Closing Remarks by the Organizers *o United Nations Office
for Outer Space Affairs
o Symposium Co-Sponsors*
- ~14.00 *Transfer to the Hotel and
End of the Symposium*