



UNITED NATIONS
Office for Outer Space Affairs

**Expert Meeting in preparation of the
United Nations/Italy Workshop on the
Open Universe Initiative**

Programme

Hosted by

The Italian Space Agency



**ASI Tor Vergata
Via del Politecnico snc, 00133 Rome, Italy**

Rome, Italy, 11-12 April 2017

Programme Committee (in alphabetical order):

G. Arrigo	ASI, Head of International Relations Unit
E. Flamini	ASI, Chief Scientist
D. García Yárnoz	UNOOSA, Programme Officer
P. Giommi	ASI, Senior Scientist, International Relations Unit
B. Negri	ASI, Head of Exploration and Observation of the Universe Unit
A. M. T. Pollock	University of Sheffield
E. Russo	ASI, Director for the Scientific and Technical Coordination

Local Organizing Committee (in alphabetical order):

S. Arena	ASI, External Relations Unit
M. De Angelis	ASI, Member of the Performance Evaluation Board
S. Di Ciaccio	ASI, President Technical Cabinet
P. Giommi	ASI, Coordinator of the Initiative
S. Iacovoni	ASI, International Relations Unit

Focal Point UNOOSA:

Daniel García Yárnoz
Office for Outer Space Affairs
United Nations Office at Vienna
P.O. Box 500
A-1400 Vienna, Austria
Email: Daniel.Garcia-Yarnoz@unoosa.org

Focal Point ASI:

Paolo Giommi
Senior Scientist
Italian Space Agency
Tel: +39 068567939
Email: paolo.giommi@asi.it

Focal Point Logistics:

Via del Politecnico snc
ASI Tor Vergata (00133 Rome, Italy)
ASI switchboard Tel.: +39 06 8567 1
Tel.: +39 06 8567 296
Email: stefania.arena@asi.it (Stefania Arena, Communication Office)

Tuesday, 11 April 2017

Morning

08:30	<i>Arrival, Registration</i>	
09:00	<u>Opening Remarks</u>	<i>E. Flamini - ASI Chief Scientist</i>
09:15	Keynote: “Open Universe,” an initiative under the auspices of COPUOS for expanding availability and accessibility of open source space science data	<i>P. Giommi - ASI</i> <i>A. Pollock - University of Sheffield</i>
09:55	<u>Expert Meeting Introduction</u>	<i>D. García Yárnoz - UNOOSA</i>
10:05	<u>Welcome Address</u>	<i>R. Battiston - President of ASI</i>
10:15	<u>Session 1: Current status and perspectives</u> <i>Chairs: E. Flamini - ASI and G. Fabbiano - IVOA/Harvard</i> <i>Rapporteur: P. Giommi - ASI</i>	
10:20	Open Science at NASA: Implementation and lessons learned	<i>G. Allen - NASA</i>
10:40	Space Science Data at ESA	<i>C. Arviset - ESA</i>
11:00	Space Science Data at JAXA - Educational perspective of JAXA’s public utilization promotion -	<i>K. Masuda - JAXA/ISAS</i>
11:20	Space Science Data at ASI	<i>E. Russo - ASI</i>
<i>11:40</i>	<i>Morning Break</i>	
12:00	High-energy astrophysics data provision at Leicester	<i>J. Osborne - University of Leicester</i>
12:20	ESO’s activities in open science data	<i>A. Williams - ESO</i>
12:40	Thirty Years of Open Science Data at CADC	<i>D. Schade - CADC</i>
13:00	Big observatories - big data: the approach to astrophysical data and open science in the CTA, E-ELT and SKA era	<i>F. Zerbi - INAF</i>
<i>13.20</i>	<i>Lunch</i>	

Afternoon

14:20

Session 1 –contd.– Current status and perspectives. Second Part

Chair: E. Russo - ASI and M. Allen - CDS

Rapporteur: S. Iacovoni, ASI

- 14:25 IVOA: the standards organization for data interoperability in astronomy *G. Fabbiano - Harvard-Smithsonian / IVOA*
- 14:45 The CDS experience *M. Allen - CDS / IVOA*
- 15:05 Legacy power in high-energy astrophysics *R. Walter - ISDC*
- 15:25 Astronomical data in Russia *D. Kovaleva - Russian Academy of Sciences / RVO*
- 15:45 *Afternoon Break*
- 16:00 ASTRONET *D. Mourard - CNRS*
- 16:20 The subtle interplay between data analysis and theoretical interpretation *R. Ruffini - ICRANet*
- 16:40 International Planetary Data Alliance: Striving to provide improved international access to data *M. Giardino - INAF / IPDA*
- 17:00** **Discussion Forum: State of the archive art** *Moderators*
- Current practice in provision of space science data: strengths and possible weaknesses; data consumer communities and their requirements; awareness of increasing demand for transparency: data accessibility, usability & robustness.
- *M. De Angelis - ASI*
 - *A. Pollock - Sheffield*
 - *E. Flamini - ASI*
- 18:00 *End of day 1*

Wednesday, 12 April 2017

Morning

09:30 **Session 2: Social and economic benefits: Open access as an enabler of education, capacity building and knowledge-based economic development**

Chairs: D. Bertolotto - ASI and L. Del Monte - ESA

Rapporteur: S. Di Ciaccio - ASI

- 09:35 Open Science and Space Science: Some OECD perspectives *C. Jolly - OECD*
- 09:55 The Economic Complexity Approach to Big Data: An Application to the Technological Impact of Astrophysics *A. Zaccaria - CNR*
- 10:15 Open Data in Education: reflections from NYU Abu Dhabi *F. Arneodo - NYU Abu Dhabi*
- 10:35 Freedom of access to scientific data: Legal aspects *S. Marchisio - University Sapienza*
- 10:55 Enabling a smarter world with Open Earth Observation Data *P. P. Mathieu - ESA*

11:15 *Morning Break*

11:35 **Session 3: New initiatives and Roadmap to future success**

Chairs: F. Pasian - INAF and A. Pollock - University of Sheffield

Rapporteur: D. García Yárnoz - UNOOSA

- 11:40 The IAU Office of Astronomy for Development (OAD) *P. Benvenuti - IAU*
- 12:00 The Brazilian Science Data Center *U. Barres - CBPF*
- 12:20 Lessons learnt from GEOSS experience in data brokering *S. Nativi - GEO / CNR*
- 12:40 Open data: experience & challenges in particle and astro-particle physics *B. Bertucci - Univ. of Perugia / INFN*

13:00 *Lunch*

Afternoon

- 14:20 A flexible catalog system for scientific publications *F. Carrai - Kayser Italia*
- 14:40 The COSPAR experience *P. Ubertini - COSPAR*

15:00 *Afternoon Break*

15:20 Observations and Recommendations for UNISPACE+50

Chair and Moderator: S. Di Pippo - Director, UNOOSA

Rapporteur: D. García Yárnoz - UNOOSA

Towards a Roadmap

The round-table will link the Expert Meeting, follow-up Workshop and the Open Universe Initiative to the preparations for UNISPACE+50 and the future use of space data and solutions to contribute to addressing the World's challenges.

Moderator:

○ *S. Di Pippo - UNOOSA*

Participants:

○ *P. Benvenuti - IAU*

○ *B. Bertucci - INFN*

○ *E. Flamini - ASI*

○ *A. Pollock - Sheffield*

○ *R. Ruffini - ICRANet*

17:00 Closing Remarks

Finalization of Expert Meeting Observations and Recommendations on the Way Forward

S. Di Pippo - Director of UNOOSA

R. Battiston - President of ASI