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  Arrival, Registration

09:00  **Opening Remarks**  
E. Flamini - ASI Chief Scientist

09:15  **Keynote:** “Open Universe,” an initiative under the auspices of COPUOS for expanding availability and accessibility of open source space science data  
P. Giommi - ASI  
A. Pollock - University of Sheffield

09:55  **Expert Meeting Introduction**  
D. García Yárnoz - UNOOSA

10:05  **Welcome Address**  
R. Battiston - President of ASI

10:15  **Session 1: Current status and perspectives**  
*Chairs: E. Flamini - ASI and G. Fabbiano - IVOA/Harvard*  
*Rapporteur: P. Giommi - ASI*

10:20  Open Science at NASA: Implementation and lessons learned  
G. Allen - NASA

10:40  Space Science Data at ESA  
C. Arviset - ESA

11:00  Space Science Data at JAXA - Educational perspective of JAXA’s public utilization promotion -  
K. Masuda - JAXA/ISAS

11:20  Space Science Data at ASI  
E. Russo - ASI

11:40  **Morning Break**

12:00  High-energy astrophysics data provision at Leicester  
J. Osborne - University of Leicester

12:20  ESO’s activities in open science data  
A. Williams - ESO

12:40  Thirty Years of Open Science Data at CADC  
D. Schade - CADC

13:00  Big observatories - big data: the approach to astrophysical data and open science in the CTA, E-ELT and SKA era  
F. Zerbi - INAF

13.20  Lunch
Afternoon 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
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.

Moderators
- 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
Chair: 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
Chair: F. Pasian - INAF and A. Pollock - University of Sheffield
Rapporteur: D. García Yáñez - 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 Yáñez - 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