

800 Years of Space at the University of Padua

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**Conference celebrating 800 years of
Science, Technology, Humanities, Art and Innovation
in Space at the University of Padua**

September 7 - 9, 2022

Report of Contributions

Contribution ID: 1

Type: **not specified**

Welcome Address and Remembrance of Prof. Stefano Debei by the Rector of the University, D. Mapelli

Wednesday, 7 September 2022 09:30 (10 minutes)

Session Classification: Opening ceremony

Contribution ID: 2

Type: **not specified**

Welcome address by the Mayor of Padova, S. Giordani

Wednesday, 7 September 2022 09:40 (10 minutes)

Session Classification: Opening ceremony

Contribution ID: 3

Type: **not specified**

President of Italian Space Agency (ASI), G. Saccoccia

Wednesday, 7 September 2022 09:50 (20 minutes)

Session Classification: Opening ceremony

Contribution ID: 4

Type: **not specified**

The significance of the conference in the frame of the 800 years celebrations

Wednesday, 7 September 2022 10:40 (20 minutes)

Presenter: PAVANELLO, S. (UNIPD)

Session Classification: Opening ceremony

Contribution ID: 5

Type: **not specified**

The historic perspective, 800 years of Comet Halley in Padova

Wednesday, 7 September 2022 11:00 (20 minutes)

Presenters: BARBIERI, C. (UNIPD); BERTINI, I. (UNIPARTHENOPE)

Session Classification: Opening ceremony

Contribution ID: 6

Type: **not specified**

Space in the Veneto Region, Science and Industry

Presenter: TBD

Session Classification: Science, Technology and Innovation in Space

Contribution ID: 7

Type: **not specified**

Space and Innovation at the University of Padova

Wednesday, 7 September 2022 14:30 (20 minutes)

Presenter: DUGHIERO, F. (UNIPD)

Session Classification: Science, Technology and Innovation in Space

Contribution ID: 8

Type: **not specified**

Space and Biomedicine at the University of Padova

Wednesday, 7 September 2022 12:40 (20 minutes)

Presenter: NARICI, M. (UNIPD)

Session Classification: Opening ceremony

Contribution ID: 9

Type: **not specified**

The Space Programs of ASI in Medicine: Global Exploration Roadmap

Wednesday, 7 September 2022 13:00 (20 minutes)

Presenter: MASCETTI, G. (ASI)

Session Classification: Opening ceremony

Contribution ID: 11

Type: **not specified**

Giuseppe Colombo and Space Geodesy

Wednesday, 7 September 2022 16:30 (20 minutes)

Presenter: CAPORALI, A. (UNIPD)

Session Classification: Science, Technology and Innovation in Space

Contribution ID: 12

Type: **not specified**

The Galileo Navigation Satellite System: status update and tribute to Galileo Galilei

Wednesday, 7 September 2022 17:10 (20 minutes)

Presenter: BUIST, P. (Galileo Reference Centre, EUSPA)

Session Classification: Science, Technology and Innovation in Space

Contribution ID: 15

Type: **not specified**

Public conference of Astronauts at Sala dei Giganti: From Space Shuttle to the future Moon and Mars exploration.

Wednesday, 7 September 2022 21:00 (1h 30m)

Public conference at Sala dei Giganti with Telmo Pievani:

- Roberto Ragazzoni presents Maurizio Cheli (Space Shuttle Columbia STS-75 mission)
- Video connections with Italian astronaut Luca Parimiano at the NASA Johnson Space Center, Houston

Contribution ID: 16

Type: **not specified**

Preserving muscle function in space

Thursday, 8 September 2022 09:50 (20 minutes)

Presenter: FERRIGNO, G. (POLMI)

Session Classification: Spaceflight, Human factors

Contribution ID: 17

Type: **not specified**

Nutritional aspects of Human Space Flight

Thursday, 8 September 2022 10:10 (20 minutes)

Presenter: BIOLO, G. (UNITS)

Session Classification: Spaceflight, Human factors

Contribution ID: **18**

Type: **not specified**

Psychological aspects of Human Space Flight

Thursday, 8 September 2022 10:30 (20 minutes)

Presenter: ANGRILLI, A. (UNIPD)

Session Classification: Spaceflight, Human factors

Contribution ID: 19

Type: **not specified**

Changes in astronauts' brain after long duration space missions

Thursday, 8 September 2022 10:50 (20 minutes)

Presenter: MARINO, M. (UNI Leuven)

Session Classification: Spaceflight, Human factors

Contribution ID: 20

Type: **not specified**

Do plants move differently in space?

Thursday, 8 September 2022 12:20 (20 minutes)

Presenter: CASTIELLO, U. (UNIPD)

Session Classification: Space and Plants

Contribution ID: 21

Type: **not specified**

Photosynthesis under simulated exoplanetary conditions

Thursday, 8 September 2022 11:40 (20 minutes)

Presenter: LA ROCCA, N. (UNIPD)

Session Classification: Space and Plants

Contribution ID: 22

Type: **not specified**

The Apollo Moon Trees

Thursday, 8 September 2022 12:40 (20 minutes)

Presenter: WILLIAMS, D. (NASA Goddard)

Session Classification: Space and Plants

Contribution ID: 23

Type: **not specified**

Solar Radiation Phenomena, from SoHO to Solar Orbiter

Thursday, 8 September 2022 14:30 (20 minutes)

Presenter: NALETTO, G. (UNIPD)

Session Classification: Living in Space Habitats, resources and dangers

Contribution ID: 24

Type: **not specified**

Lunar and Martian Resources

Thursday, 8 September 2022 15:10 (20 minutes)

Presenter: FLAMINI, E. (U. Chieti)

Session Classification: Living in Space Habitats, resources and dangers

Contribution ID: 26

Type: **not specified**

Genomic Changes Driven by Radiation-Induced DNA Damage and Microgravity in Human Cells

Thursday, 8 September 2022 14:50 (20 minutes)

Presenter: MOGNATO, M. (UNIPD)

Session Classification: Living in Space Habitats, resources and dangers

Contribution ID: 27

Type: **not specified**

The Austrian Space Forum (OeWF) experience on space habitats analogues

Thursday, 8 September 2022 15:30 (20 minutes)

Presenter: R. ALBRECHT AND G. GROEMER (OeWF)

Session Classification: Living in Space Habitats, resources and dangers

Contribution ID: 29

Type: **not specified**

Astronaut analogs

Friday, 9 September 2022 14:51 (7 minutes)

Presenter: CINELLI, I. (AIKO)

Session Classification: Video Talks

Contribution ID: 31

Type: **not specified**

President of Istituto Nazionale di Astrofisica (INAF), M. Tavani

Wednesday, 7 September 2022 10:10 (20 minutes)

Session Classification: Opening ceremony

Contribution ID: 32

Type: **not specified**

The Space Science Programme of ESA

Wednesday, 7 September 2022 11:40 (20 minutes)

Presenter: COLANGELI, L. (ESA)

Session Classification: Opening ceremony

Contribution ID: 33

Type: **not specified**

Space Activities at CISAS

Wednesday, 7 September 2022 12:00 (20 minutes)

Presenter: PIOTTO, G. (UNIPD - CISAS)

Session Classification: Opening ceremony

Contribution ID: 34

Type: **not specified**

Space programs at the INAF - Astronomical Observatory of Padova

Wednesday, 7 September 2022 12:20 (20 minutes)

Presenter: RAGAZZONI, R. (INAF - OAPD)

Session Classification: Opening ceremony

Contribution ID: 35

Type: **not specified**

European programs in Biomedicine of Space: Education, (Operational) Development

Presenter: GREEN, D. (ESA)

Session Classification: Science, Technology and Innovation in Space

Contribution ID: 36

Type: **not specified**

25 years of Research Projects on Space Data, Instruments and Astronautics

Wednesday, 7 September 2022 15:10 (20 minutes)

Presenter: FOING, B. (ILEAWG & EuroMoonMars)

Session Classification: Science, Technology and Innovation in Space

Contribution ID: 37

Type: **not specified**

From Mercury to the Medicean Moons: BepiColombo and Juice

Wednesday, 7 September 2022 15:50 (20 minutes)

Presenter: CREMONESE, G. (INAF)

Session Classification: Science, Technology and Innovation in Space

Contribution ID: **38**

Type: **not specified**

The “Giuseppe Colombo”Matera station of ASI

Wednesday, 7 September 2022 16:50 (20 minutes)

Presenter: BIANCO, G. (ASI)

Session Classification: Science, Technology and Innovation in Space

Contribution ID: 39

Type: **not specified**

The ESA PANGAEA training program for astronauts (by video connection)

Wednesday, 7 September 2022 16:10 (20 minutes)

Presenter: MASSIRONI, M. (UNIPD)

Session Classification: Science, Technology and Innovation in Space

Contribution ID: 40

Type: **not specified**

Round Table Discussion on Space Future

Wednesday, 7 September 2022 17:30 (1h 10m)

convener G. Caprara (journalist)

panelists:

P. Benvenuti (UNIPD),

P. Cooper (economist),

V. La Regina (president NanoRacks UE),

V. Giorgio (Thales Alenia Space),

R. Ayazi (Nereus),

S. Di Pippo (Bocconi University),

M. Praet (ESA)

Session Classification: Science, Technology and Innovation in Space

Contribution ID: 41

Type: **not specified**

Human factors in space: why and how to measure them

Thursday, 8 September 2022 09:30 (20 minutes)

Presenter: BABILONI, F. (UNIROMA)

Session Classification: Spaceflight, Human factors

Contribution ID: 42

Type: **not specified**

Space Farming

Thursday, 8 September 2022 12:00 (20 minutes)

Presenter: DE PASCALE, S. (UNINA - Federico II)

Session Classification: Space and Plants

Contribution ID: 43

Type: **not specified**

Electrodynamic tethers to help the sustainability of near-Earth space

Thursday, 8 September 2022 16:50 (20 minutes)

Presenter: LORENZINI, E. (UNIPD)

Session Classification: Innovation on Space Systems at CISAS

Contribution ID: 44

Type: **not specified**

Enabling propulsion technologies at University of Padua for future mini satellite missions

Thursday, 8 September 2022 17:10 (20 minutes)

Presenter: PAVARIN, D. (UNIPD)

Session Classification: Innovation on Space Systems at CISAS

Contribution ID: 45

Type: **not specified**

Research activities in the field of space debris at the University of Padova

Thursday, 8 September 2022 17:30 (20 minutes)

Presenter: FRANCESCONI, A. (UNIPD)

Session Classification: Innovation on Space Systems at CISAS

Contribution ID: 46

Type: **not specified**

Solar pressure on spacecraft: problems and opportunities

Thursday, 8 September 2022 17:50 (20 minutes)

Presenter: BRUNELLO, P.F. (UNIPD)

Session Classification: Innovation on Space Systems at CISAS

Contribution ID: 47

Type: **not specified**

Young Professionals

Thursday, 8 September 2022 18:10 (50 minutes)

L. Barilaro (MCAST): Space activities at the Malta College of Arts, Science & Technology
S. Crotti (PoliMi & EuroMoonMars): Habitat Internal Design and Human Factors Studies
M. Campisi (UNIPD): Space and Biological ageing
T. Giacon (UNIPD): Astronaut analog EMMPOL EXPERIENCE
N. Sztajnkrzyer (UNIPD): Astronaut analog CHILE EXPERIENCE
G. Schievano (UNIPD): Satellite Navigation
A. Barbaro (GEOS): Shock origin of diamonds in ureilitic meteorites
I. Tomasi (UNIPD, GEOS): Earth-Moon-Mars analogues: lavatubes and possible underground settlements.

Session Classification: Session on Young Professionals and Students experiences and ideas

Contribution ID: 48

Type: **not specified**

Space Diplomacy: a new paradigm for international relations?

Friday, 9 September 2022 09:30 (20 minutes)

Presenter: BURIGANA, D. (UNIPD)

Session Classification: Session on Policy in Space

Contribution ID: 49

Type: **not specified**

Outer space is not a legal vacuum - and it is not yours, either

Friday, 9 September 2022 09:50 (20 minutes)

Presenter: ZANNONI, D. (UNIPD)

Session Classification: Session on Policy in Space

Contribution ID: 50

Type: **not specified**

Microelectronics and the global race to space

Friday, 9 September 2022 10:10 (20 minutes)

Presenter: PACCAGNELLA, A. (UNIPD)

Session Classification: Session on Policy in Space

Contribution ID: 51

Type: **not specified**

Quantum Communications in Space

Friday, 9 September 2022 10:30 (20 minutes)

Presenter: VILLORESI, P. (UNIPD)

Session Classification: Session on Policy in Space

Contribution ID: 52

Type: **not specified**

Theology to the test of the extraterrestrial life

Friday, 9 September 2022 10:50 (20 minutes)

Presenter: ARNOULD, J. (CNES)

Session Classification: Session on Policy in Space

Contribution ID: 53

Type: **not specified**

Possible Future Developments in Space, Science, and Universities

Friday, 9 September 2022 11:10 (20 minutes)

Presenter: ALBRECHT, R. (OeWF)

Session Classification: Session on Policy in Space

Contribution ID: 54

Type: **not specified**

ArtMoonMars program and ITACCUS projects bridging Space and Arts

Friday, 9 September 2022 12:00 (20 minutes)

Presenter: FOING, B. (ILEWG & EuroMoonMars)

Session Classification: Session on Humanities and Art in Space

Contribution ID: 55

Type: **not specified**

The Moon Gallery: an introduction

Friday, 9 September 2022 12:20 (20 minutes)

Presenters: SITNIKOVA, A. (Moon Gallery Foundation); GLUKOVA, E. (Moon Gallery Foundation)

Session Classification: Session on Humanities and Art in Space

Contribution ID: 56

Type: **not specified**

Saints and Sinners in the sky (video talk)

Friday, 9 September 2022 12:40 (20 minutes)

Presenter: MENDILLO, M. (Boston Univ.)

Session Classification: Session on Humanities and Art in Space

Contribution ID: 57

Type: **not specified**

Round Table: L'importanza dei distretti regionali Italiani nella new space economy

Friday, 9 September 2022 15:00 (1 hour)

M. Barbarossa (Sidereus),
V. Cafaggi (Dainese Dairlab),
G. Dal Lago (Officina Stellare),
G. Marchiori (E.I.E. Group),
F. Zoppas (Regione Veneto, Rir-Air)

Session Classification: Round Table discussion and closing ceremony

Contribution ID: 58

Type: **not specified**

Biology and Radiation Research in Space and Analogues

Friday, 9 September 2022 14:37 (7 minutes)

Presenter: BAATOUT, S. (SCK Leuven)

Session Classification: Video Talks

Contribution ID: 59

Type: **not specified**

Women and Poetry in Space

Friday, 9 September 2022 14:44 (7 minutes)

Presenter: SOBEL, D. (Scientific American)

Session Classification: Video Talks

Contribution ID: **60**

Type: **not specified**

Director ILEAWG & EuroMoonMars program

Wednesday, 7 September 2022 10:30 (10 minutes)

Presenter: FOING, B. (ILEAWG & EuroMoonMars)

Session Classification: Opening ceremony

Contribution ID: **61**

Type: **not specified**

From Hubble to Webb: international collaboration at its best

Wednesday, 7 September 2022 14:50 (20 minutes)

Presenter: SIRIANNI, M. (ESA)

Session Classification: Science, Technology and Innovation in Space

Contribution ID: 63

Type: **not specified**

Programs of ASI Science Directorate for Universities and Research Institutes

Thursday, 8 September 2022 16:30 (20 minutes)

Presenter: COSMO, Mario (ASI)

Session Classification: Innovation on Space Systems at CISAS

Contribution ID: **64**

Type: **not specified**

Space Image Processing

Friday, 9 September 2022 14:30 (7 minutes)

Presenter: BONORA, E. (Freelance)

Session Classification: Video Talks