

SUMMER SCHOOL ON SPACE AND TECHNOLOGY

Organized by

SPACE
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edu

3 JULY - 6 JULY

**SUMMER COURSE ON SPACE
AND TECHNOLOGY 4 ALL**

7 JULY

**INTERNATIONAL CONFERENCE
ON SPACE AND TECHNOLOGY**

**MONDAY 3 JULY - FRIDAY 7 JULY
9.30 -18.00**

ARISTOTLE UNIVERSITY RESEARCH DISSEMINATION CENTER



Co-funded by
the European Union

3 JULY - 6 JULY



AGENDA

SUMMER COURSE ON
SPACE AND TECHNOLOGY 4 ALL

AGENDA

DAY 1 | MONDAY 3 JULY

9.30-10.00 Registration

10.00-10.30

Welcome and Introduction to the Summer Course
Space Edu Partners

Opening speech

Ms. Paraskevi Papantoniou

Director for Space, Directorate General for Defence Industry
and Space, European Commission

10.30-11.00

Course 1_INT:

*"Bubbles and Waves: Intersecting Pathways in Space Culinary
and Earth's Water Quality Reservoir Surveillance"*

Dr. John Lioumpas R&D EYATH

11.00-11.30 Coffee Break

11.30-12.00

Course 2_INT:

"Space applications: An overview"

Dimitra Stefoudi PhDc Leiden University

12.05-12.35

Course 3_INT:

"Space threats and International Politics"

Ilias Tsitsios MSc, LL.M, NATO Air Operations Coordination

12.40-13.10

Roundtable 1:

"Technologies for Space Sustainability"

AGENDA

13.15-14.30 Lunch

14.30-15.00

Lab 1: "Drafting rules for Space Sustainability"

15.00-16.00

Groups formation (Workshops preparatory meeting)

DAY 2 | TUESDAY 4 JULY

10.00-11.00

Students Space Workshop:

Introduction and assignments from Space Edu Partners

11.00-11.30 Coffee Break

11.30-12.00

Course 4_TELECOM: "Basics of orbital mechanics"

Prof. Valentin Rakovic Faculty of Electrical Engineering and Information Technologies, Ss. Cyril and Methodius University in Skopje

12.05-12.35

Course 5_TELECOM:

"Introduction to satellite and deep-space communications"

Prof. Zoran Hadzi-Velkov Ss. Cyril and Methodius University in Skopje

12.40-13.10

Lab 2: "Activities and on-going project"

Aristotle Space & Aeronautics Team - ASAT

13.15-14.30 Lunch

AGENDA

14.30-16.00

Visit 1: to ASAT lab

16.00-18.00

Offline preparation of next day Workshop

DAY 3 | WEDNESDAY 5 JULY

10.00-10.30

KEYNOTE SPEAKER:

"The role of Satellite Communications in Beyond 5G Networks"

Prof. George Karagiannidis School of Electrical and Computer Engineering, Aristotle University of Thessaloniki

10.30-11.00

KEYNOTE SPEAKER:

"Space Exploration & European Space Agency:

Technology for Space Applications"

Prof. Thodoris Karapantsios School of Chemistry, Aristotle University of Thessaloniki

11.00-11.30 Coffee Break

11.30-12.00

Course 6_SCIENCE: "Life Support Technologies in Space:

A Chemical Engineering approach;

Systems for environmental control in confined environments"

Prof. Sergio Caserta Università degli Studi di Napoli Federico II

12.05-12.35

Course 7_SCIENCE: "Life Support Technologies in Space:

A Chemical Engineering approach; Biomedical Engineering"

Prof. Stefano Guido Università degli Studi di Napoli Federico II

AGENDA

12.40-13.10

KEYNOTE SPEAKER: "Mars Exploration and the Quest for the First Return of Samples to Earth"

Dr. Yiangos Mikellides NASA Jet Propulsion Laboratory

13.15-14.30 Lunch

14.30-15.00

KEYNOTE SPEAKER:

"Artemis Accords: The beginning of the future"

Dr. Rebecca Bresnik NASA Office of the General Counsel

15.00-16.00

Preparation for the next day presentations

16.00-18.00

Offline preparation of next day Workshop

DAY 4 | THURSDAY 6 JULY

10.00-11.00

Students Space Workshop: Presentation of assignments from the participants of Space Edu Partners

11.00-11.30 Coffee break

11.30-12.00

Course 8_SCIENCE: "Biofilm, when bacteria get organized!"

Dr. Romain Briandet Micalis Institute, Université Paris-Saclay, AgroParis Tech

12.05-12.35

Course 9_SCIENCE: "Microbial responses to microgravity-induced biofilm formation"

Dr. Marie-Françoise Noirot-Gros Micalis Institute, Université

AGENDA

12.40-13.10

Course 10_SCIENCE: "Passive limitation of surface contamination by perFluoroDecylTrichloroSilane coatings in the ISS during the MATISS experiments"

Dr. Laurence Lemelle CNRS, Laboratoire de Géologie de Lyon-Terre Planètes et Environnement, ENS Lyon

13.15-14.30 End of the Course

15.00-16.00

Roundtable 2: **Space and Technology 4All**

Oral presentations from students

Visit 2: to Chemical and Environmental Technology Lab



COMING NEXT

International Conference on Space and Technology

"Space 2.0: Challenges and Prospects"



7 JULY



AGENDA

INTERNATIONAL CONFERENCE
ON SPACE AND TECHNOLOGY

*"TECHNOLOGY FOR SPACE 2.0:
CHALLENGES AND PROSPECTS"*



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9.30-10.00 Registration

10:00-10:15

Welcome Space Edu Partners

10:15-11.00

"Astronaut's day in Space"

Adrianos Gloemis ESA

11.00-11.30

"A Geostationary Satellite Mission: From Design to EOL Operations"

Dr. Vasilios Kapinas Hellas Sat

11.30-12.00 Coffee break

12.00-12.30

"Commercialization of Outer Space Resources"

Prof.Philippe Achilleas Université Paris-Saclay

12.30-13.00

"Military Uses of Outer Space"

Prof. Frans von der Dunk University of Nebraska at Lincoln

13:00 - 13:30

"Governments supporting New Space as anchor customers and first buyers – situation in the US and Europe"

Dr. Ingo Baumann BHO Legal

13:30 - 14:00

Roundtable 3: *"The 1 trillion dollar question:
How will Space change the world?"*

THE END

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ARISTOTLE
UNIVERSITY
OF THESSALONIKI



UNIVERSITÀ DEGLI STUDI DI NAPOLI
FEDERICO II

INRAE



"Ss. Cyril and Methodius" University in Skopje
FACULTY OF ELECTRICAL ENGINEERING
AND INFORMATION TECHNOLOGIES



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