

COSPAR PE1 Program - July 19-22, 2022

Venue: Megaron Athens International Conference Centre

Timetable

TIME UTC+3	Tuesday 19/7	Wednesday 20/7 @EA	Thursday 21/7	Friday 22/7	
09:30	Free time	Free time	Session 7 Astronomy and Space Science in the classroom	Session 11 Large Scientific Infrastructures enriching online and digital learning	
11:00			Coffee Break		
11:30	Session 1 Innovation in Education		Session 8 Life in the Universe	Session 12 Robotic Telescopes	
13:00	Lunch		Lunch		
14:30	Session 2 Astronomy for Development		Session 9 Space Exploration	Session 13 Teacher's projects	
16:00	Coffee Break	Bus departure from Megaron and travel to EA	Coffee Break		
16:30	Session 3 Teacher's presentations	Session 4 Students as Digital Storytellers	Session 10 Planetary Defense	Session 13 Evaluation and closing	
17:00					
18:00	Free time		Coffee Break	Free time	
18:30					
19:00					
19:15		Session 5 Light Pollution			
21:15		Light Dinner			
22:00		Session 6 Night Observation			
23:30		Bus departure from EA and travel to Megaron			

Session Descriptions

July 19

11:30 - 13:00

Session 1 - Innovation in Education

11:30 Workshop Opening

11:45 Innovative methodologies for education (Rosa Doran / NUCLIO, Portugal)

14:30 - 16:00

Session 2 - Astronomy for Development

14:30 The Portuguese Office of Astronomy for Development (Gustavo Rojas & Rosa Doran / NUCLIO, Portugal)

15:30 Breaking the Wall of Astronomy and Sahrawi Refugees (Sandra Benítez-Herrera / ESA)

16:00 - 16:30

Coffee Break

16:30 - 18:00

Session 3 - Teachers' Presentations

16:30 Teachers' Presentations

17:00 Invited presentation (Silvana Copeceski Stoinski / MCTI, Brazil)

July 20 - At Ellinogermaniki Agogi

16:00 - 17:00

Bus departure from Megaron and travel to EA

17:00 - 19:00

Session 4 - Students as Digital Storytellers

17:00 Space Research (Gernot Groemer / Austrian Space Forum, Austria)

17:45 DiSTARS Project and Platform (Angelos Lazoudis / EA, Greece)

18:30 DiSTARS Educational Tools and Resources (Gustavo Rojas / NUCLIO, Portugal)

19:00 - 19:15

Coffee Break

19:15 - 21:15

Session 5 - Light Pollution

19:15 CliC-PoLiT Project and Scenario (Loukas Katikas / EA, Greece)

20:00 Reinforce Project (Manolis Chaniotakis / EA, Greece)

21:15 - 22:00

Coffee Break

22:00 - 23:30

Session 6 - Night Observation

23:30 - 00:00

Bus departure from EA and travel to Megaron

July 21

09:30 - 11:00

Session 7 - Astronomy and Space Science in the classroom

09:30 Cooperation Through Education in Science and Astronomy Research: the CESAR project (Sandra Benítez / ESA)

11:00 - 11:30

Coffee Break

11:30 - 13:00

Session 8 - Life in the Universe

11:30 Are we alone in the Universe? (Juan Angel Vaquerizo Gallego / ESA)

13:00 - 14:30

Lunch

14:30 - 16:00

Session 9 - Space Exploration DiSTARS

14:30 Humans in Space (Gustavo Rojas / NUCLIO, Portugal)

15:00 Spacesuit Lab Virtual Tour (Gernot Groemer / Austrian Space Forum, Austria)

16:00 - 16:30

Coffee Break

16:30 - 18:00

Session 10 - Planetary Defense

16:30 The International Astronomical Search Collaboration (Patrick Miller / IASC)

July 22

09:30 - 11:00

Session 11 - Large Scientific Infrastructures enriching online and digital learning

09:30 Planning an observing session with Stellarium (Gustavo Rojas / NUCLIO, Portugal)

10:15 Introduction to Image Processing with Salsa J (Rosa Doran / NUCLIO, Portugal)

11:00 - 11:30

Coffee Break

11:30 - 13:00

Session 12 - Robotic Telescopes

11:30 Faulkes Telescope Educational Resources (Sarah Roberts / FTP)

12:15 Using the Faulkes Robotic Telescopes (Fraser Lewis / FTP)

13:00 - 14:30

Lunch

14:30 - 16:00

Session 13 - Teacher's projects

14:30 Presentation of teachers' projects

16:00 - 16:30

Coffee Break

16:30 - 18:00

Session 14 - Evaluation and Closing

16:30 Workshop Evaluation

17:30 Concluding Remarks

Abstracts

Cooperation Through Education in Science and Astronomy Research: the CESAR project

In this workshop we will introduce the CESAR initiative and present the different online resources that were developed during the pandemic to address topics related to Astronomy and Space Science in the classroom, in an engaging way for primary and secondary students. We will also run a demo on the tool ESASky, which allows teachers to carry out small scientific projects with their students using state-of-the art data from ESA space missions.

Are we alone in the Universe?

In this session we will address one of the more interesting topics in Astrophysics: the search for life in the Universe. Through four hands-on activities and experiments we will discover how astrobiologists are looking for evidence of the presence of life in our Solar System. These will include simulating impact craters and icy volcanoes in distant moons, extracting DNA molecules as well as studying the water in Mars.

Analog missions and Spacesuit Lab Tour

Gernot Groemer has led 13 international Mars simulation missions in remote deserts across the globe. Carefully selected "analog astronauts" emulate aspects of a future human Mars mission to understand the technical and operational challenges of such a mission. This lecture addresses those field missions and the science behind it, underlined with breathtaking imagery from the expeditions. Afterwards, Gernot Groemer, will be showing a sneak-peak into the spacesuit laboratory of the Austrian Space Forum , showcasing the Aouda spacesuit simulator, a cutting edge tool to allow astronauts to go on extravehicular activities, aka spacewalks.

Using the Faulkes Robotic Telescopes

Fraser Lewis will describe how robotic telescopes can be used not just for astronomy, but for a broader approach within STEM. He will show how activities involving these facilities (such as those provided by the Faulkes Telescope Project and the National Schools' Observatory) span a range from introductory activities such as image processing to more advanced project-type scientific investigations