INGENIUM

10 Days of INGENIUM

19 -23 May 2025

Summer Senior School-"From Earth Surface to Space"

ΠΑΝΕΠΙΣΤΗΜΙΟ ΚΡΗΤΗΣ
UNIVERSITY OF CRETE

MONDAY 19	TUESDAY 20	WEDNESDAY 21	THURSDAY 22	FRIDAY 23
Transportation Meeting Point: Centre of Heraklion **Departure from Heraklion: 09:30** **Venue:** Auditorium "Georgios Lianis", FORTH	Transportation Meeting Point: Centre of Heraklion **Departure from Heraklion: 08:30**	Transportation Meeting Point: Centre of Heraklion **Departure from Heraklion: 08:30** **Venue:** Auditorium "Georgios Lianis", FORTH	Transportation Meeting Point: Centre of Heraklion **Departure from Heraklion: 10:30**	**Venue**:Ibis Styles Heraklion Central
10:00-10:30	**10:00-14:00**	**09:00-09:45**	**12:00-12:45**	**10:00-11:00**
Registration	**Finokalias Atmosperic Station** **Nofalias** **Folklore & Historical Museum of Neapolis**	**"Satellite observations of the atmospheric composition"** **John P. Burrows Institute of Environmental Physics and Remote Sensing IUP/IFE, University of Bremen**	**Arrival at Geoparko Anogeia: "Wellcome and introduction to Psiloritis Geopark, Info Center, Anogia"**	**"Satellite Optical Communications"** **Zoran Sodnik, Optical Communication Engineer, European Space Agency**
10:30-11:30		**09:45-10:30**		**11:00-11:30**
Welcome Ceremony		*Coffee Break* **10:30-11:15** **"Fundamentals of free space communications"** **Dimitris Papazoglou, Dpt. Materials Science and Engineering, UoC**		*Coffee Break* **11.30-14.00** **"Disruption in the space industry? The emergence of cubesat technology" Paris Chrysos, National and Kapodistrian University of Athens** **"International Space Law in the Age of Expanding Private Space Activities", Anthi Koskina, National Observatory of Athens; IdEF- Université Sorbonne Paris Nord; Athens PIL & Prof. Manolis Plionis, National Observatory of Athens, Greece; Department of Physics, Aristotle University of Thessaloniki, Greece; CERIDES—Excellence in Innovation and Technology, European University of Cyprus, Nicosia, Cyprus** **Modeling, Simulation, and Validation in New Space Market Managing. Nikolaos-Antonios Livanos, Managing Director EMTECH SPACE S.A**
11:30-12:30		**11:30-12:15**		**" The Greek space ecosystem", Orfeas Voutyras, Programme Coordination Senior Associate, ESA BIC Greece**
"Atmospheric composition and its impacts (climate, health, ecosystems) – The scientific basis" **Nikolaos Mihalopoulos, Dpt.Chemistry,UoC**		**"The data traffic bottleneck in space and basic principles of satellite optical communications"** **Zoran Sodnik, Optical Communication Engineer European Space Agency**		**Science Factory** **"Science communication in the 21st century: Practices and methods in the age of AI", Nikolaos Karampekios, National Documentation Centre/EKT**
12:30-14:00	**14:00-15:30**	**12:30-14:00**	**13:00-14:30**	**14:00-15:30**
Lunch Break	*Lunch Break*	*Lunch Break*	*Lunch Break*	*Lunch Break*
14:00-14:45	**15:30**	**14:00-14:45**	**14:30-20:00**	**15:30-16:30**
"Atmospheric composition and its impacts (climate, health, ecosystems) – The scientific basis" **Maria Kanakidou, Dpt.Chemistry,UoC**	**Departure from Plaka**	**"The Skinakas Observaroty"** **Vassiliki Pavlidou, Dpt. Physics, UoC**	**Visit at Zominthos, Nida plateau, Idaion Andron**	**Round table with speakers**
14:45-15:30		**15:00-15:45**	**20:30-23:00**	**16:30-17:00**
"Numerical modelling from box to global 3-d and AI"Prof. Dr. Guy P. Brasseur, Max Planck Institute for Meteorology		**"Optical Gound Stations: A new perspective for astronomical observatories"** **Dimitris Papazoglou, Dpt. Materials Science and Engineering, UoC**	**Visit at Skinakas Observatory**	**Questions and discussion** **Closing**
15:30-17:30		**16:00-16:45**	**23:00**	
Science Factory **"Technology transfer and innovation management: developing and accelerating science-based innovative ventures"** **Antonios Angelakis, Assistant Professor, Dpt Political Science, UoC &** **Dr. Katerina Papadoulaki, UoC**		**"Secure communications and Quantum Cryptography"** **Wolf von Klitzing, IESL-FORTH**	**Departure from Skinakas**	
Innovation Workshop **Moderator: Dr. Katerina Papadoulaki, UoC**				
20:30				
Location				
Traditional Cretan Dinner				