April 7, Thursday

Location: Building I, ground floor, IE.007
Budapest University of Technology and Economics
Magyar tudósok krt. 2., Budapest, H-1117

The first day will be live streamed for online participants.

Session Chair: László Bacsárdi

14:00 Opening ceremony
Orsolya Ferencz, Ministerial Commissioner, Ministry of Foreign Affairs and Trade
Hassan Charaf, Dean, Faculty of Electrical Engineering and Informatics, BME
Kálmán Kovács, President, Hungarian Astronautical Society

14:15 Invited presentation
The effects of the war on the global space policy
Balázs Bartóki-Gönczy, Head of Outer Space and Social Sciences Research Center University of Public Services, Hungary

14:40 Invited presentation
HUNOR Hungarian Astronaut Program Briefing
Balázs Zábori, HUNOR program manager, Centre for Energy Research, Hungary

15:05 Invited presentation
Emerging space ecosystem (tbc)
Michal Brichta, Head of Industrial Branch of the Slovak Space Office
15:30  Coffee break

Session Chair: Kálmán Kovács

16:00-18:00: Technical presentations – Session Science and Technology I

*Experiments on MRC-100 PocketQube*
Tibor Herman and Levente Dudás

*QO-100 video signal transmitting*
Anna Gertrúd Fábián and Róbert Varga

*Miniaturized and modular flow chemical reactor for space applications*
Ferenc Darvas, Ferenc Boncz, János Takács and Gergo Mezohegyi

*GNSS interference events at Hungarian airports*
Bence Takács, Daniel Garcia, Mercedes Reche and Rita Somogyi

*Nationwide Ground Motion Map of Hungary Based on Sentinel-1 PSI Data*
Péter Farkas, Gyula Grenerczy and Sándor Frey

*The Jovian Plasma Dynamics and Composition Analyzer (JDC) - a sensor of the Particle Environmental Package (PEP)*
Máté Kerényi, Philipp Wittmann and Martin Wieser

*Radio astrometric support for the JUICE mission to Jupiter*
Sándor Frey, Judit Fogasy, Krisztina Perger, Krisztina Gabányi and Janka Kőmíves

*Hungarian Participation in JUICE Mission of ESA*
Janos Nagy, László Hevesi, Pál Gábor Vízi, Lajos Szalai, István Horváth and Sándor Szalai
April 8, 2022, Friday

Location: online
Registered participants will receive the link for online participation.

**Session Chair: TBC**

**10:00-12:15: Technical presentations – Session Science and Technology II**

*Rain Field Sensing Supported by GPS Signal Attenuation*
László Csurgai-Horváth, János Bitó, Péter Horváth, Bálint Péter Horváth and Árpád László Makara

*Application of Artificial Intelligence in Satellite Communications*
Árpád László Makara and László Csurgai-Horváth

*Limits of ion-trajectory control using electric field*
András Reichardt, Árpád Makara and László Csurgai-Horváth

*A wide-band spectrum monitoring system as a scientific payload for MRC-100 3-PQ(Pocket Qube) student satellite*
Yasir Humad and Levente Dudás

*InSAR monitoring results of Transcarpathia in the GeoSES Project*
Bálint Magyar and Roland Horváth

*Using quantum algorithms for Earth Observation data processing*
Doaa Subhi and László Bacsárdi

*Topic discovery in the diaries of Antarctica winteroverers with multilingual deep sentence encoders*
Márton Makrai, Bea Ehmann and László Balázs

*Distant Psychological Monitoring of ICE-Groups: Quantitative and Qualitative Content Analysis Approaches*
Bea Ehmann, Anna Altbacker, Borbala Tölgyesi and László Balázs

*Investigating Cognitive Changes in Space Analog Paradigms*
Borbála Tölgyesi, Anna Altbäcker, Irén Barkasi, Bea Ehmann and László Balázs

**12:15- 13:15 Lunch break**
13:15-15:15: Session Education and Outreach II

Invited presentation
*Nationwide cooperation in space education – The UniSpace Hungary Consortium (tbc)*
Bianka Parragh, University of Public Services

Invited presentation
*Space Engineering Curriculum at the Budapest University of Technology and Economics*
László Csurgai-Horváth and László Bacsárdi, BME Department of Broadband Infocommunications and Electromagnetic Theory, Hungary

IRF SpaceLab – *a Swedish example of opening research infrastructure for external users*
Mate Kerenyi and Stas Barabash

*Székely Mikó T3Ki-rover*
Mária Pető

*Flórián Vámosi and László Vámosi*
Astronomy activities at the Mihaly Tancsics Grammar School of Kaposvar

*How Tech Companies can help to Teach Space*
Flórián Vámosi, Miksa Vámosi and Andrew Yake

*Simulated Mars Rover Model Competition – Years of Pandemic Challenge*
Pál Gábor Vizi and Attila Sipos

15:00 Closing remarks