



TECHNICAL UNIVERSITY OF KOŠICE
Faculty of Aeronautics

**13th International Scientific Conference of
Doctoral Students**

May 28th 2026

General Partner



The Letové prevádzkové služby Slovenskej republiky štátny podnik (LPS SR, š. p.), a state enterprise, is a provider of Air Traffic Services.

The mission of Letové prevádzkové služby Slovenskej republiky štátny podnik, a state enterprise, is the provision of air navigation services in airspace and on assigned aerodromes of the Slovak Republic.

Every passenger on scheduled or charter flight over the territory of the Slovak Republic is an indirect client of Letové prevádzkové služby Slovenskej republiky štátny podnik (LPS SR), a state enterprise. Air traffic controllers control flights of aircraft over flying, departing and landing to/ from an airport or taxiing on the ground. The basic goal of LPS SR is to prevent collisions of aircraft in the air and on the ground, to maintain safe and well-organized air traffic flow and to provide advice and information necessary for safe flight in airspace and on assigned aerodromes of the Slovak Republic. LPS SR managed to handle huge increase of traffic maintaining required level of safety and with minimum delays. The goal of LPS SR for the future is a further increase of the capacity of the airspace of the Slovak Republic and to minimize delays as much as possible while maintaining required level of safety.

LPS SR provides these services:

- Air Traffic Services
- Aeronautical Telecommunication Services
- Aeronautical information service
- Rescue Coordination Centre
- Training Centre
- Consulting services
- Instrument Flight Procedure Design
- Flight Calibration Service

Contact:



www.lps.sk/en



Letové prevádzkové služby
Slovenskej republiky



LPS SR



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Letové prevádzkové služby Slovenskej republiky, štátny podnik

Air Navigation Services Provider



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International Scientific Conference of Doctoral Students

Conference program

May 28, 2026 - Aula A01- Faculty of Aeronautics

Time	Topic	Presenter
08:30 – 09:00	Registration of the participants	
09:00 – 09:20	Opening of the conference	
09:20 – 09:30	Airport Capacity Management in Conditions of Operational Variability and the Role of Slot Coordination	Tatiana GAJDUŠKOVÁ
09:30 – 09:40	From Benefits to Risk Management of Electric GSEs at Airports	Karolína HREŠKOVÁ
09:40 – 09:50	Economic Assessment of Airport Security and Operational Efficiency Within the Digital Airport Concept: A DEA-Based Pilot Study	Diana MAJORSKÁ
09:50 – 10:00	Barriers to the Implementation of Circular Economy in Slovak Aviation Enterprises	Adam TURAC
10:00 – 10:10	Pre-Research Analysis of Cybersecurity at Selected Airports	Samuel TOMAŠČIN
10:10 – 10:40	Coffee break	
10:40 – 10:50	High-Altitude Ice Crystal Icing in Jet Engines	Vladyslav KORNIA
10:50 – 11:00	Comparative Analysis of Language Assessment Frameworks CEFR, ICAO LPR and STANAG 6001	Miroslava SEMANČIKOVÁ
11:00 – 11:10	Prompt Engineering for Multi-Tier LLM Classification in Systematic Reviews of Venture Capital Investment Strategies	Csaba ARENDAS
11:10 – 11:20	Modeling the Safety and Efficiency of Airport Systems in the Conditions of Growing Demand	Marek KURDEL
11:20 – 11:30	Graph and Figure Digitization Tools for Systematic Reviews: A Methodological Review	Seid BELAY
11:30 – 11:40	Preliminary Results of Model Predictive Control of Fuel-Flow Delivery for a Small Turbojet Engine with an Electric Fuel Pump	Dávid HRIADEL
11:40 – 11:50	Modeling Cumulative Rank Shift in Expanding University Rankings: A Comparison of Polynomial and S-Curve Approaches	Barbara TÓTH

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Conference program

May 28, 2026 - Aula A01- Faculty of Aeronautics

Time	Topic	Presenter
12:00 – 13:00	Lunch break	
13:00 – 13:10	Natural Language Interfaces for Airport Ground Logistics Robots: A Synthetic Dataset Generation Pipeline for Fine-Tuning Language Models	Dániel HORTI
13:10 – 13:20	Methodological Preparation of Meteorological Data for a Local Fuzzy Fog Prediction Model at Sliač Airport	Kristína OZDINCOVÁ
13:20 – 13:30	Post-Flight Evaluation of Barometric Updates in an ESKF-Based TVC Estimator for a Small Rocket	Marian KMENT
13:30 -13:40	Analysis of Best Practices in Deploying Integrated Building Security Systems in the Context of Civil Aviation Facility Protection	Ján JEVČÁK
13:40 – 13:50	UAV Supported Distributed Architecture for Environmental Monitoring	Bertalan BESZEDES
13:50 – 14:10	Coffee break	
14:10 – 14:20	The Impact of Behavior Theories and Models on Health and Risk Behavior Change and Maintenance Research: A Citation-Based Bibliometric Analysis	Zsombor ZRUBKA
14:20 – 14:30	Universal Measuring Platform for Atmospheric Parameters and Air Quality Monitoring with the Use of Unmanned Aerial Vehicles	Matej ŠČERBA
14:30 – 14:40	Language-Based Task Routing for Vision-Language-Action Systems	Balint FARKAS
14:40 – 14:50	Risk Assessment Repeatability and the Evaluation of Risk Mitigation Effectiveness in Organizational Governance	Miloslav PECINOVSKY
14:50 – 15:00	Development and Finite Element Validation of a Small-Scale Rocket Structure	Radoslav ČATLOŠ
15:00 – 15:15	Closing of the conference	