

Tuesday, June 24 2025

8:30

9:00

9:15

9:45

10:15

10:45

12:45

13:45

14:45

15:15

17:15

19:00

Welcome and Registration		
Welcome by Conference Chairs <i>Dirk Schaefer, EUROCONTROL</i> <i>Eric Nelderman, FAA</i>		
Welcome by Prague Airport Welcome by xxx		
Keynote 1 "Digitalization and automatization in Prague airport Operations" <i>Tomas Vlacil, Prague Airport</i>		
Coffee		
Integrated airport/airside operations I <i>Session chair: Joe Post, University of South Florida</i> 81: Robust Management of Airport Security Queues Considering Passenger Non-compliance with Chance-Constrained Optimization <i>Mark Hansen, University of California, Berkeley</i> 43: Speech-to-Route: Leveraging Large Language Models for Taxi Route Visualization <i>Phat Thai, Nanyang Technological University</i> 53: Machine learning predictions of Target Off-Block Time and Turnaround Duration for all European A-CDM Airports <i>Paolino De Falco, EUROCONTROL</i>	ATM performance measurement and management I <i>Session chair: Jose Miguel De Pablo, CRIDA</i> 5: Assessing Airport Surface Traffic Performance from Open Sources of Aviation Data <i>Xavier Olive, ONERA</i> 40: Traffic complexity measurement via collective dynamics analysis of arrival traffic patterns <i>Xuhao Gui, Nanjing University of Aeronautics and Astronautics</i> 19: Unlocking Runway Capacity: Enhancing Efficiency through Dynamic Pairwise Aircraft Wake Separation <i>Kam Hung Ng, The Hong Kong Polytechnic University</i>	Autonomous, unmanned and remotely piloted aircraft systems and emerging operations I <i>Session chair: Nicolas Durand, ENAC</i> 3: An Evaluation of UTM ConOps for Drone Deliveries: From Pre-Planned Air Corridors to Dynamic 4D Trajectories <i>Shuangxia Bai, City University of Hong Kong</i> 23: Optimization-Guided Exploration of Advanced Air Mobility Congestion Management Strategies with Stochastic Demands <i>Max Li, University of Michigan</i> 30: A Concept for Procedural Terminal Area Airspace Integration of Large Uncrewed Aircraft Systems at Non-Towered Airports <i>Tim Felix Sievers, DLR & Jordan Sakakeeny, NASA Ames</i>
Lunch		
Doctoral paper session 1 <i>Session chair: David Lovell, University of Maryland</i> Design of a hybrid-electric powertrain model for trajectory optimization <i>Edgar Böttcher, TU Dresden</i> Structural predictability of large-scale aircraft interaction networks <i>Raúl López-Martín, IFISC</i>	Doctoral paper session 2 <i>Session chair: Marc Bourgois, EUROCONTROL</i> Multimodal Traffic Coordination for Safety Landings <i>Pavithra Sathya Kumar, University of the Bundeswehr, Munich, Germany</i> Spatial Analysis-Driven Facility Location Optimization for Vertiports <i>Elif Erkek, TU Dresden</i>	Doctoral paper session 3 <i>Session chair: Yu Yu Zhang, University of South Florida</i> Learning to Explain Air Traffic Situation <i>Hong-ah Chai, Korea Aerospace University</i> Modified Dijkstra's Algorithm for Search and Rescue Operations in Dynamic Wildfire Environments <i>Ela Ghisellini, ENAC</i>
Coffee		
Integrated airport/airside operations II <i>Session chair: Dirk Kügler, DLR</i> 56: Chances and Pitfalls of the Point Merge Concept – A design Optimization Framework with a Case Study for Leipzig/Halle Airport on Noise, Capacity and Flight Efficiency <i>Hartmut Fricke, TU Dresden</i> 28: A new method to compute more appropriate off-block times and taxiing paths for airport surface management <i>Ruxin Wang, ENAC</i>	ATM performance measurement and management II <i>Session chair: Jose Miguel De Pablo, CRIDA</i> 31: Exploring Airlines Scheduled Buffer Time Adjustment Strategies: An Analytical Approach <i>Ying Zhou, Nanyang Technological University</i> 87: Identification and Characterization for Disruptions in the U.S. National Airspace System (NAS) <i>Mark Hansen, University of California, Berkeley</i> 7: Impacts of ADS-B In Approach Applications during Revenue Operations <i>Dan Howell, Regulus Group</i>	Autonomous, unmanned and remotely piloted aircraft systems and emerging operations II <i>Session chair: Nicolas Durand, ENAC</i> 32: Including intent in detect-and-avoid systems for remotely piloted aircraft systems <i>Sybert Stroeve, NLR</i> 45: Development of Cooperative Operating Practices for Upper-Class E Traffic Management (ETM) <i>Paul Lee, NASA</i> 70: Vertiport Placement for Urban Air Mobility to Reduce Time for Multimodal Travel <i>Yashovardhan S. Chati, Tata Consultancy Services</i>
end of day 1		
Committee Dinner		

Wednesday, June 25 2025

6:00	5k Fun Run		
10:00	<p>Safety, resilience, and security <i>Session chair: Sybert Stroeve, NLR</i></p> <p>64: An MAC Probability Assessment Framework for Integrated Operations in Urban Air Mobility Considering Safety Barriers <i>Jinpeng Zhang, Beihang University</i></p> <p>90: Anomaly Detection of Aircraft on Final Approach to an Aerodrome with Temporal Fusion Transformers <i>Nidhal Bouaynaya, Rowan University</i></p> <p>4: Responsible AI for Air Traffic Management: Application to Runway Configuration Assistance Tool <i>Milad Memarzadeh, NASA</i></p>	<p>Air traffic flow management and optimization I <i>Session chair: Daniel Delahaye, ENAC</i></p> <p>10: Efficient Real-Time Aircraft ETA Prediction via Feature Tokenization Transformer <i>Liping Huang, A*STAR</i></p> <p>41: Tactical Demand and Capacity Balancing with Uncertainty Using Incremental Path-Search based on Spatio-Temporal Graph <i>Yutong Chen, Nanyang Technological University</i></p> <p>65: Flight allocation in flight-centric air traffic control: A MILP model approach <i>Andréas Guitart, ENAC</i></p>	<p>Weather, climate and energy efficiency I <i>Session chair: Tom Reynolds, MIT Lincoln Lab</i></p> <p>6: Assessing Climate Impact of Contrails: Insights from Japan's High-Density Airspace and Meteorological Conditions <i>Katsuhiro Sekine, The University of Tokyo</i></p> <p>16: Quantifying Uncertainty Distributions for Airport Capacity Predictions <i>Benjamin Tolley, MIT Lincoln Laboratory</i></p> <p>46: Recommending Traffic Management Initiatives in Non-Convective Weather <i>James Jones, MIT</i></p>
12:00	Light Lunch		
12:30		<p>Tutorial 1 Reinforcement Learning for Air Traffic Control Applications with BlueSky-Gym <i>Jan Groot, TU Delft</i></p>	<p>Tutorial 2 Contrail-Modeling & Trajectory-Optimization for Climate-Smart Flight Operations using Python-based Open-Source Libraries <i>Manuel Soler & Abolfazl Simorgh, UC3M</i></p>
14:00	Refreshments		
14:45	Visit Prague Airport (optional)		

Thursday, June 26 2025

8:30	Keynote 2		
9:00	Panel 1 Panel topic		
10:30	Coffee		
11:00	Automation, human factors, and decision support systems I <i>Session chair: Jacco Hoekstra, TU Delft</i> 63: Ensuring UAS Airworthiness: Deep Learning-Based Acoustic Health Monitoring of Motor Health <i>Manuel Arias Chao, Zurich University of Applied Sciences</i> 29: Do ATCOs Need Explanations, and Why? Towards ATCO-Centered Explainable AI for Conflict Resolution Advisories <i>Katherine Fennedy, Nanyang Technological University</i> 13: A Data-Driven Framework for Next-Day Traffic Forecasting at Small Airports with Multi-Scale Machine Learning <i>Zhuoxuan Cao, University of Maryland</i>	Air traffic flow management and optimization II <i>Session chair: Michael Schultz, University of the Bundeswehr Munich</i> 57: Shadow Evaluation of Real-Time Machine Learning Services in the Houston Airspace <i>William Jeremy Coupe, NASA</i> 60: Learning Network Flow Control Strategies from Miles-In-Trail Data <i>Nianxi Xie, Nanjing University of Aeronautics and Astronautics</i> 54: A machine learning model to aid in predicting flight trajectory sequencing delays near the arrival airport <i>Danae Mitkas & Martin Durbin, FAA</i>	Weather, climate and energy efficiency II <i>Session chair: Tom Reynolds, MIT Lincoln Lab</i> 55: Probabilistic Risk-Aware Flight Trajectory Planning under Convective Weather <i>Wei Zhou, Technical University of Catalonia</i> 58: Weather Considerations for Airport Capacity Decision Support Development <i>Tom Reynolds, MIT Lincoln Laboratory</i> 75: Contrail, or not contrail, that is the question: the "feasibility" of climate-optimal routing <i>Junzi Sun, TU Delft</i>
13:00	Lunch		
14:00		Tutorial 3 Customizing LLMs for ATM: Challenges and Opportunities <i>Thin Pham and Yash Guleria, NTU</i>	Tutorial 4 Can We Reproduce the "contrail !contrail" Paper? A Step-by-Step Trajectory Optimization Tutorial with OpenAP, Traffic, and FastMeteo <i>Junzi Sun, TU Delft</i>
15:30	Coffee		
16:00		Doctoral paper session 4 <i>Session chair: Dirk Schaefer, EUROCONTROL</i> Optimisation of the North Atlantic Air Traffic Management to mitigate environmental impact <i>Nils Ahrenhold, DLR</i> Dynamic modeling of UAV trajectory prediction in an urban environment <i>Md Ashrafur Islam, TU Dresden</i>	Doctoral paper session 5 <i>Session chair: James Jones, MIT Lincoln Lab</i> Spatiotemporal Trajectory Planning for Multi-Aircraft Terminal Operations in UAM Considering Wake Effects and Dynamics <i>Di Lv, Tsinghua University</i> Generative Stress-Testing for Air Traffic Management Resilience <i>Sinan Abdulhak, University of Michigan</i>
17:00	end of day 3		
19:00	Gala Dinner		

Friday, June 27 2025

8:30	Automation, human factors, and decision support systems II <i>Session chair: Cheryl Quinn, NASA</i> 67: Leveraging Retrieval-Augmented In-context Learning for Complex Air Traffic Scenario Generation <i>Yash Guleria, Nanyang Technological University</i> 88: Automating Terminal Airspace Vectoring: A Machine-Assisted Approach for Sequencing, Spacing and Merging of Arrival Flights <i>Lim Zhi Jun, Nanyang Technological University</i> 61: Adaptive Traffic-Following Scheme for Orderly Distributed Control of Multi-Vehicle Systems <i>Anahita Jain, The University of Texas at Austin</i>	Air traffic flow management and optimization III <i>Session chair: Hartmut Fricke, TU Dresden</i> 82: From En-Route to Touchdown: Uncertainty Analysis of Inbound Traffic Flows to Singapore Changi Airport <i>Daniel Lubig, TU Dresden</i> 85: A robust optimization approach for dynamic airspace configuration <i>Go Nam Lui, Lancaster University</i> 86: Predicting Reactionary Delays in a Hub-Spoke Network using Graph Attention Neural Networks <i>Constanca Veiga, TU Delft</i>	4-D Trajectory planning, prediction, and management <i>Session chair: Max Li, University of Michigan</i> 8: Stochastic Cruise Speed Control for Time-Based Metering Under Uncertainty <i>Yoshinori Matsuno, Japan Aerospace Exploration Agency</i> 9: Forecasting of Airline En Route Delay for Individual Flights with Supervised Learning <i>Marta Ribeiro, TU Delft</i> 69: Optimized Sequencing and Conflict-Free Path Planning for Arrival Flights during Runway Direction Changes <i>Hao Jiang, Nanyang Technological University</i>
10:30	Coffee		
11:00	Panel 2 Panel topic		
12:30	Light Lunch		
13:30	Plenary Closing Session Best Paper Awards		
14:30	End of Day 4		