

Monday, July 1

Registration (08:30 - 09:00 AM)		
Lecture Theatre at The ARC (LHN-LT-B1-15)		
9:00 AM	Introduction Eric Neiderman U.S. Federal Aviation Administration	Marc Bourgois Eurocontrol
9:15 AM	Welcome Address Sameer Alam Nanyang Technological University	Vu Doung (Director, ATMRI)/Prof Lam (SVP) Nanyang Technological University
9:30 AM	Keynote 1 Patrick Ky CEO, International Centre for Aviation Innovation	

Coffee / Refreshment (10:00 - 10:30 AM)		
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Regular Paper Sessions (10:30 - 12:00 PM)		
Room: TR+13 (LHN-L1-01)		
RP1: Human Performance 1		
Session Chair: ?		
10:30 AM	31 Alex Konkol On the Potential Use of Synthetic Voices in Aviation: Comparison to Human Speech	14 Rodolphe Fremont, Yan Xu, Antonios Tsourdos and Inalhan Gokhan Urban Corridor-Based Tactical Conflict Resolution with Flight Plan Adherence and Uncertainty Resilience using a Multi-Agent Reinforcement Learning Solver
11:00 AM	6 Fedja Netjasov Decision Support System for Shift Managers based on finite state Markov chains	56 Martin Schlosser, Hannes Braßel and Hartmut Fricke Analysis of Aircraft Ground Trajectories: Map-Matching with Open Source Data for Modeling Safety-Driven Applications
11:30 AM	41 Marvin Mutz, Gunnar von Oesen, Florian Hasse, Dag Zeppenfeld and Sebastian Schier-Morgenthal "How do you read?" - Dynamics of future human-automation teams in air traffic control	97 Kaijing Ding, Ke Liu, Lu Dai and Mark Hansen Real-Time Go-Around Prediction: A case study of JFK airport
Room: TR+16 (LHN-L1-04)		
RP2: Safety / ATC 1		
Session Chair: ?		
Room: TR+17 (LHN-L1-05)		
RP3: Fuel and Emissions 1		
Session Chair: ?		
Room: TR+16 (LHN-L1-04)		
RP5: Infrastructure		
Session Chair: ?		
Room: TR+17 (LHN-L1-05)		
RP6: Fuel and Emissions 2		
Session Chair: ?		

Tutorial Session 1 (12:10 - 01:10 PM)		
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12:10 PM	Junzi Sun, David Lovell, Seth Young ADSB: What's In, What's Not	Joost Ellerbroek BlueSky: Setup	Thinh Pham ATM & ML (Airport)
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Lunch (01:10 - 02:10 PM)		
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Regular Paper Sessions (02:10 - 03:10 PM)		
Room: TR+13 (LHN-L1-01)		
RP4: Economics and Policy		
Session Chair: ?		
2:10 PM	17 Haochen Wu, Kevin Sun, Jackson Miller, Oliver Jia-Richards and Max Li Spaceport Facility Location Planning within the US National Airspace System	59 Dario Batioja Alvarez, Kairat Tuleubekov, Matthew Brynick and Richard Ji Investigating Reflective Cracking Initiation and Propagation Rates in Asphalt Concrete Overlays on Concrete Slabs: Laboratory and Full-Scale Experiment Analysis
2:40 PM	99 Victor Qin and Hamsa Balakrishnan Modeling Competition Between Service Providers in Advanced Air Mobility	60 Rajrup Mitra, Md Abdullah All Sourav, Ayhan Oner Yucel, Halil Ceylan, Berk Gulmezoglu, Sunghwan Kim and Matthew Brynick Airfield Pavement Crack Segmentation: Potential and Future
Room: TR+16 (LHN-L1-04)		
RP5: Infrastructure		
Session Chair: ?		
Room: TR+17 (LHN-L1-05)		
RP6: Fuel and Emissions 2		
Session Chair: ?		

Refreshments (03:10 - 03:40 PM)		
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Tutorial Session 1 (03:40 - 04:40 PM)		
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3:40 PM	Xavier Olive Traffic: OSN Data	Joost Ellerbroek BlueSky: Applications	Tara Gibson Human Readiness Level
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Doctoral Symposium Sessions (04:50 - 05:50 PM)		
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Room: TR+13 (LHN-L1-01)			
Doctoral Symposium 1			
Session Chair: ?			
4:50 PM	30 Maximilian Mendiguchia Meuser and Volker Gollnick Climate impact driven adaptation of European airspace structure to support climate-optimized flight planning	19 Chris Nguyen and Rhea Liem A transformer-based encoder model for flight arrival sequencing	58 Sungju Maeng and Makoto Itoh A Study on Communication Modality in UATM System Discussions and suggestions from analyzing teamwork in ATM and UTM
5:20 PM	25 Zarah Lea Zengerting and Volker Gollnick Operational measures to mitigate the climate impact of aviation - A comparison	82 Zhuoxuan Cao, Aaron Webb, David Lovell and Seth Young A comparative analysis of departure runway occupancy time by aircraft type and flight mission	68 Seonho Kim and Jongho Hong Flight delay time and costs from extreme weather

Tuesday, July 2


 5K fun run (Gardens by the Bay) (07:00 - 08:00 AM)
 Registration and Coffee / Refreshment (09:50 - 10:20 AM)

Lecture Theatre at The ARC (LHN-LT-B1-15)




10:20 AM **Keynote 2** **Speaker?**
Affiliation?

 Regular Paper Sessions (11:00 AM - 12:30 PM)			
	Room: TR+13 (LHN-L1-01)	Room: TR+16 (LHN-L1-04)	Room: TR+17 (LHN-L1-05)
	RP7: Human Performance 2 Session Chair: ?	RP8: Safety / ATC 2 Session Chair: ?	RP9: Complexity and Information Session Chair: ?
11:00 AM	88 Ashton Low Kin Yun, Nimrod Lilith, Sameer Alam and Leston Poh Choo Kiat Deep Neural Network-Based Automatic Speech Recognition for ATC-Pilot Audio Transcription	5 Gabriel Jarry, Daniel Delahaye, Eric Feron, Stephane Puechmorel and Christophe Hurter Real Time Aircraft Atypical Approach Detection for Air Traffic Control	69 Pablo Gascó and Ramon Dalmau A Comprehensive Evaluation of Data Drift Metrics for Air Transportation Applications
11:30 AM	83 Jan van Doorn, Junzi Sun, Jacco Hoekstra, Patrick Jonk and Vincent de Vries Whisper-ATC: Open Models for Air Traffic Control Automatic Speech Recognition with Accuracy	78 Yash Guleria, Duc-Thinh Pham and Sameer Alam Advancing Beyond Conformal Conflict Resolution in Air Traffic Control: Balancing Efficiency and Conformance	53 Petar Andraši, Tomislav Radišić, Kristina Samardžić and Doris Novak Air Traffic Complexity Hotspot Detection in Uncertain Adverse Weather Scenarios
12:00 PM	15 Maximilian Peukert, Lothar Meyer and Anna Lena Meyenburg Time Matters: Exploring a Short Fatigue Measurement Method in Air Traffic Control	38 Kim Gaume, Richard Alligier, Nicolas Durand, David Gianazza and Xavier Olive Extracting Lateral Deconfliction Actions from Historical ADS-B data with Median Regression	67 Stanley Förster and Hartmut Fricke A Systematic Literature Review on Complexity--Safety Correlation Models Towards Safety-Conscious Arrival Management

 **Lunch (12:30 - 01:30 PM)**

 Doctoral Symposium Sessions (01:30 - 02:30 PM)			
	Room: TR+13 (LHN-L1-01)	Room: TR+16 (LHN-L1-04)	Room: TR+17 (LHN-L1-05)
	Doctoral Symposium 4 Session Chair: ?	Doctoral Symposium 5 Session Chair: ?	Doctoral Symposium 6 Session Chair: ?
1:30 PM	10 Zhiqiang Liu, Jose Luis Muñoz Gamarra and Juan José Ramos Gonzalez A Multi-Agent negotiation framework for planning conflict-free U-space scenarios	94 Barrett Campbell Optimizing Aeromedical Clinical Decision Support Systems through Framework Development	65 Ziming Wang, Yanjun Wang and Mark Hansen Trajectory Clustering in a Multi-Airport System: A Deep Clustering with Generative Approach
2:00 PM	32 Yuting Xi, Man Liang, Alessandro Gardi and Roberto Sabatini Real time tactical path planning for UAV in main corridor and byway corridor traffic structure	46 Nhat-Hoang P. Nguyen, Duc-Thinh Pham and Vu Duong Hierarchical Multi-agent Distributed Method for Automated Slot Allocation in Virtual Centralized ATFM	66 Nutchanon Suvittawat and Nuno Antunes Ribeiro Aircraft Surface Defect Inspection System Using AI with UAVs

2:30 PM **Participants free for the remainder of the day**

 Student Activities
2:30 PM <i>Guided Tour to Monument in City/ Sungei Buloh (by National Parks)</i>
 Conference Committee Meeting
2:30 PM <i>Location: TBD</i>
 Conference Committee Dinner
8:00 PM <i>Location: TMC @ Fullerton Waterboat House (Private Room)</i>

Wednesday, July 3

 Coffee / Refreshment (09:00 - 09:30 AM)			
 Regular Paper Sessions (09:30 - 11:30 AM)			
<div style="display: flex; justify-content: space-between;"> <div style="width: 30%;"> <p>Room: TR+13 (LHN-L1-01)</p> <p>RP10: UAS/UAM/Space 1</p> <p><i>Session Chair: ?</i></p> </div> <div style="width: 30%;"> <p>Room: TR+16 (LHN-L1-04)</p> <p>RP11: System Performance 1</p> <p><i>Session Chair: ?</i></p> </div> <div style="width: 30%;"> <p>Room: TR+17 (LHN-L1-05)</p> <p>RP12: Advanced Modeling 1</p> <p><i>Session Chair: ?</i></p> </div> </div>			
9:30 AM	<p>3 Calin Andrei Badea, Andres Morfin Veytia, Joost Ellerbroek and Jacco Hoekstra</p> <p>Urban Wind Measurement and Modelling for U-space Operations</p>	<p>64 Wayne Ng and Nuno Antunes Ribeiro</p> <p>A Modeling Framework for Rapid Assessment of Terminal Airspace Configurations and Planning Scenarios</p>	<p>12 Malte von der Burg and Alexei Sharpanskykh</p> <p>Multi-Agent Planning for Autonomous Engine-Off Taxiing at Large Airports</p>
10:00 AM	<p>76 Wei Zhou, Zhengyi Wang, Imen Dhief and Sameer Alam</p> <p>A Reinforcement Learning Approach for Flight Re-routing in Space launch Failure Scenarios with Dynamic Debris Hazards</p>	<p>33 Haochen Wu, Xinting Zhu, Shuchang Li, Ying Zhou, Lishuai Li and Max Li</p> <p>Distributionally Robust Ground Delay Programs with Learning-Driven Airport Capacity Predictions</p>	<p>23 Amine Heffar and Ramon Dalmau</p> <p>A Universal Machine Learning Model for Better Runway Allocation Predictions</p>
10:30 AM	<p>26 Josue N. Rivera and Dengfeng Sun</p> <p>Air Traffic Management for Collaborative Routing of Unmanned Aerial Vehicles via Potential Fields</p>	<p>62 Zhihan Xu, Ziming Wang, Yanjun Wang and Daniel Delahaye</p> <p>Flow based spatio-temporal graph network model for predicting airport network delays</p>	<p>20 Wissam Chalabi, Alessandro Bombelli and Glen Purdam</p> <p>The Vehicle Routing Problem for Aerial Firefighting</p>
11:00 AM	<p>40 Justin Poh, Nancy Leveson and Natasha Neogi</p> <p>A Safety-Driven Approach to Exploring and Comparing Air Traffic Management Concepts for Enabling Urban Air Mobility</p>	<p>42 Yuhan Jiang, Luigi De Giovanni, Carlo Lancia and Guglielmo Lulli</p> <p>An analysis of trajectory centered ATFM with airspace users' preference scores</p>	<p>79 Stanley Förster and Hartmut Fricke</p> <p>Probabilistic Prediction of Estimated Time of Arrival Identifying Sources of Variance and Out-of-Sample Issues</p>
<p>Tutorial Session 1 (11:40 AM - 12:40 PM)</p>			
11:40 AM	<p>Room: TR+13 (LHN-L1-01)</p> <p>Junzi Sun</p> <p>OpenAP Tool Chain</p>	<p>Room: TR+16 (LHN-L1-04)</p> <p>NTU Team</p> <p>Connected VR (Hololens) in virtual towers</p>	
 Lunch (12:40 - 01:40 PM)			
 Regular Paper Sessions (01:40 - 03:10 PM)			
<div style="display: flex; justify-content: space-between;"> <div style="width: 30%;"> <p>Room: TR+13 (LHN-L1-01)</p> <p>RP13: UAS/UAM/Space 2</p> <p><i>Session Chair: ?</i></p> </div> <div style="width: 30%;"> <p>Room: TR+16 (LHN-L1-04)</p> <p>RP14: System Performance 2</p> <p><i>Session Chair: ?</i></p> </div> <div style="width: 30%;"> <p>Room: TR+17 (LHN-L1-05)</p> <p>RP15: Advanced Modeling 2</p> <p><i>Session Chair: ?</i></p> </div> </div>			
1:40 PM	<p>37 AuthorsYuk Shan Cheung, Peter van der Geest, Tom van Birgelen and Jinyoung Choi</p> <p>Safety Targets for Urban Air Mobility Vehicles - From a perspective of Third Party Risk due to UAM operations in the Netherlands</p>	<p>55 Anahita Jain, Husni Idris and John-Paul Clarke</p> <p>Impact of Traffic-Following on Order of Autonomous Airspace Operations</p>	<p>70 Kevin Zimmer, Hamsa Balakrishnan and Amedeo Odoni</p> <p>Improving Robustness through Buffer Placement in the Gate Assignment Problem: An Empirical Approach</p>
2:10 PM	<p>7 Casey Denham and William Cummings</p> <p>Air Traffic Management Impacts of a Vertiport Closure</p>	<p>74 Hasnain Ali, Duc-Thanh Pham and Sameer Alam</p> <p>Reduced Taxi Delays with Intelligent Departure Metering Advisory Tool (I-MATE): Insights from Air Traffic Controller Validation Experiments</p>	<p>87 Reinier Vos, Junzi Sun and Jacco Hoekstra</p> <p>A Transformer-based Trajectory Prediction Model to Support Air Traffic Demand Forecasting</p>
2:40 PM	<p>92 Shangqing Cao, Xuan Jiang, Emin Burak Onat, Mark Hansen, Raja Sengupta and Anjan Chakrabarty</p> <p>Fleet Size and Spill for UAM Operation under Uncertain Demand</p>	<p>72 Krishna Kalyanam, Milad Memarzadeh, John Crissman, Rebekah Yang and Kanvasi Tejasen</p> <p>Applying Machine Learning Tools for Runway Configuration Decision Support</p>	<p>61 Banishree Ghosh, Yixiang Lim, Timothy Tay, Sheng Zhang and Jaya Shankar Pathmasuntharam</p> <p>A Physical Aircraft-Following Model for Aerodrome Modelling and Simulation</p>
 Refreshments (03:10 - 03:40 PM)			
<p>Showcase Session (03:40 - 04:00 PM)</p>			
3:40 PM	<p>Lecture Theatre at The ARC (LHN-LT-B1-15)</p> <p>Hartmut Fricke, TU Dresden</p> <p>The Smart Mobility Lab in Lusatia, Germany – a unique Test Environment for eVTOLs</p>		
 Doctoral Symposium Sessions (04:00 - 05:30 PM)			
<div style="display: flex; justify-content: space-between;"> <div style="width: 30%;"> <p>Room: TR+13 (LHN-L1-01)</p> <p>Doctoral Symposium 7</p> <p><i>Session Chair: ?</i></p> </div> <div style="width: 30%;"> <p>Room: TR+16 (LHN-L1-04)</p> <p>Doctoral Symposium 8</p> <p><i>Session Chair: ?</i></p> </div> </div>			
4:00 PM	<p>34 Muhammad Fazlur Rahman, Joost Ellerbroek and Jacco Hoekstra</p> <p>Effect of CNS Systems Performance on Autonomous Separation in U-Space</p>	<p>71 Anh Nguyen-Duy and Duc-Thanh Pham</p> <p>Multi-Agent Reinforcement Learning for Multi-Airport Slot Scheduling</p>	
4:30 PM	<p>44 Sasha Vlaskin, Emmanuel Sunil, Joost Ellerbroek, Jacco Hoekstra and Dennis Nieuwenhuisen</p> <p>Autonomous Separation Management System for Drones Through Optimal Layer Interactions</p>	<p>73 Zhi Jun Lim and Sameer Alam</p> <p>Optimizing Terminal Maneuvering Area Operations: A Comprehensive Study with a Focus on Extended Arrival Manager and Multi-Agent Negotiation Framework</p>	
5:00 PM	<p>63 Finn Sutherland, Matthew Marino, Simon Watkins and Abdulghani Mohamed</p> <p>The Role of Vertiport Design for a Safe Wind Field for AAM Operations</p>		
 Venue tour of Chinese Heritage Center and Gala Dinner			
6:00 PM	<p>Location: Nanyang Lake Pavillion, Yunnan Gardens</p>		

Thursday, July 4



Coffee / Refreshment (09:00 - 09:30 AM)

Lecture Theatre at The ARC (LHN-LT-B1-15)

9:30 AM **Keynote 3**

Massimiliano Zanin

Institute for Cross-Disciplinary Physics and Complex Systems, University of the Balearic Islands (UIB) and the Spanish National Research Council (CSIC)



Regular Paper Sessions (10:10 AM - 11:40 PM)

Room: TR+13 (LHN-L1-01)

RP16: Human Performance 3

Session Chair: ?

10:10 AM **9** Sinan Abdulhak, Anthony Carvette, Kate Shen, Robert Goldman, Bill Tuck and Max Li
User Feedback-Informed Interface Design for Flow Management Data and Services (FMDS)

10:40 AM **39** Sergen Dag, Alejandro Murrieta-Mendoza, Kian Tan and Stefan Froehlich
Accelerating UCO Sequence Validation in iCAS ATM System with Dynamic Flight Profiles

11:10 AM **47** Sinan Abdulhak, Wayne Hubbard, Karthik Gopalakrishnan and Max Li
ChatATC: Large Language Model-Driven Conversational Agents for Supporting Strategic Air Traffic Flow Management

Room: TR+16 (LHN-L1-04)

RP17: Trajectory Optimization

Session Chair: ?

52 Thomas Zeh, Judith Rosenow, Martin Lindner, Stanley Förster and Hartmut Fricke
Trajectory and Airspace Optimization Depending on Controller Task Load

11 Xavier Olive, Manuel Waltert, Ryota Mori and Philippe Mouyon
Filtering Aircraft Surface Trajectories Using Information on the Taxiway Structure of Airports

93 Ramon Dalmau, Chunyao Ma and Sameer Alam
Mastering the Management of the Vertical Flight Profile with Reinforcement Learning

Room: TR+17 (LHN-L1-05)

RP18: Network Management

Session Chair: ?

51 Santiago Rodriguez, Daniel Delahaye and Rodrigo Ventura
Crossing Waypoint Optimization in Free Route Airspace

36 Martina Galeazzo, Luigi De Giovanni, María Florencia Lema-Esposto and Guglielmo Lulli
An Integer Programming approach to Dynamic Airspace Configuration

91 Emin Burak Onat, Shangqing Cao, Raiyan Rizwan, Xuan Jiang, Mark Hansen, Raja Sengupta and Anjan Chakrabarty
A Simulation-Optimization Framework for Developing Wind-Resilient AAM Networks



Lunch (11:40 - 12:40 PM)



Awards and Closing Remarks (12:40 - 01:40 PM)

12:40 PM

Lecture Theatre at The ARC (LHN-LT-B1-15)