DAY 1 (JUNE-02)

Wed. | **CONFERENCE OPENING SESSION**

8:00	Welcome Address	Dres Zellweger - General Chair
8:10	Opening Keynote	Peter Hotham - SESAR JU
8:45	Opening Keynote	Jozef Rohacs - Budapest University of Technology & Economics

9:00	**KEYNOTE TALK 1: Marc Baumgartner – IFATCA**		
10:00		COFFEE BREAK	

	I **Safety and Security I (Chair: John Shortle - GMU)**	II **Environmental and Weather (Chair: Mark Weber - MIT)**	III **Prospective Studies and Economics (Chair: Lorenzo Castelli - Trieste)**
10:30	**Bloem &** Blom - Bayesian Analysis of Accident Rate, Trend and Uncertainty in Commercial Aviation	**Krozel**, Mitchell, Pääkkö, Polishchuk - Throughput/Complexity Tradeoffs for Routing Traffic in the Presence of Dynamic Weather	**Lu**, Finger - What Kind of Aviation Infrastructure Privatization is Needed in China
11:00	**Netjasov**, Vidosavljevic, Tosic, Everdij, Blom - Stochastically and Dynamically Coloured Petri Net Model of ACAS Operations	**Kushta**, Solomos, Kallos - Contibution of European Aviation on the Air Quality of the Mediterranean Region: A Modeling Study	**Ryerson**, Hansen - Capturing the Impact of Fuel Price on Jet Aircraft Operating Costs with Engineering and Econometric Models
11:30	**Vogel**, Thiel, Fricke - A Quantitative Safety Assessment Tool based on Aircraft Actual Navigation Performance	Hansen, **Buxi** - Generating Day-of-Operation Probabilistic Capacity Profiles from Weather Forecasts	**Violin**, Labbé, Castelli - En Route Charges for ANSP Revenue Maximization
12:00		LUNCH	

	I **Safety and Security II (Chair: Henk Blom - NLR)**	II **Advanced Modeling I (Chair: John Lygeros - ETH Zurich)**	III **CNS/ATM I (Chair: Hartmut Fricke - TU Dresden)**
1:30	**Scholte**, Blom, Pasquini - Study of Safety Validation Needs and Approaches Implied by SESAR	**Eckstein** - Data Driven Modeling for the Simulation of Converging Runway Operations	**Kageyama**, Fukuda - An Analysis of Delays in Air Transport in Japan
	Thiel, Fricke - Collision Risk on Final Approach – a Radar Data Based Evaluation Method to Assess Safety	**Gariel**, Salaün, Feron - Tracking Failures in the Air Traffic System: A Model Based on Physical and Functional Decompositions	**Medina**, Sherry - Analysis of "Tarmac Delays" at Philadelphia Airport
2:00			
2:30	Zhang, **Shortle** - Comparison of Arrival Tracks at Different Airports	**Fangqin**, Minghua - Game Equilibrium Analysis on an Auctioning Method for Airport Congesting Resource Allocation	**Tastambekova**, Puechmorela, Delahayea, Rabut - Trajectory Prediction by Functional Regression in Sobolev Space
3:00	**Benedetto**, Di Matteo, D'Innocenzo - Stochastic Validation of ATM Procedures by Abstraction Algorithms	**Vakili**, Ball - Fair Slot Allocation of Airspace Resources Based on Dual Values for Slots	**Dougui**, Delahaye, Mongeau - A New Method for Generating Optimal Conflict Free 4D Trajectory
3:30		TEA BREAK	

	I **Decision Support Tools (Chairs: J. Schroeder - NASA & M.A. Piera - UAB)**	II **Advanced Modeling II (Chair: Daniel Delahaye - ENAC)**	III **CNS/ATM II (Chair: Sakae Nagaoka, U Tokyo)**
	Lymperopoulos, Chaloulos, Lygeros - An Advanced Particle Filtering Algorithm for Improving Conflict Detection in Air Traffic Control	Zhang, **Chauhan**, Chen - Modeling and Predicting Taxi Times	**Ganji**, Lovell, Ball - Resource Allocation in Flow-Constrained Areas with Stochastic Termination Times And Deterministic Movement
4:00			
4:30	**Popescu**, Augris, Feigh - A Stochastic Model for Air Traffic Control Radio Channel Utilization	**Zúñiga**, Piera, Ruiz - A TMA 4DT CD/CR Causal Model Based in Path Shortening/Path Stretching Technique	**Corolli**, Castelli, Lulli - The Air Traffic Flow Management Problem with Time Windows
5:00	**Kotegawa**, Fry, Puchaty, DeLaurentis - Impact of US Airline Network Topology on Air Transportation Efficiency	**Vidal**, Rakas - Impact of Lightning Strikes on National Airspace System (NAS) Outages: A Statistical Approach	**Rumler**, Günther, Fricke. Weißhaar - Flight Profile Variations due to the Spreading Practice of Cost Index Based Flight Planning
5:30	Zhang, **Nayak**, Diana - Estimation and Comparison of the Impact of Single Airport Delay to the National Airspace System using Multivariate Simultaneous Models	**Henriques** - Ontology and Rules for International Airspace Security	**Glover**, Ball - Stochastic Integer Programming Models for Ground Delay Programs with Weather Uncertainty

6:30	**Free Night** **ICRAT Program Committee Dinner Meeting**

Thu.

		DAY 2 (JUNE-03)		

6:30 — **5K RACE (to be detailed at the conference)**

8:30 — **KEYNOTE TALK 2: Leo Prusak - Eastern District Manager/LaGuardia Air Traffic Manager, FAA**

9:30 — COFFEE BREAK

I Future Concepts and Innovative Ideas I (Chair: M. Bourgois - ECTRL)	II Advanced Modeling III (Chair: Nicolas Durand - DSNA)	III CNS/ATM III (Chair: Peter Hecker - TU Br)
Yousefi, Zadeh, Tafazzoli - Dynamic Allocation and Benefit Assessment of NextGen Flow Corridors	**Nikoleris,** Hansen - Queueing Models for Operations in NextGen	**Krupanský,** Neužil, Gelnarová, Svoboda, Mejzlík, Herodes - Enhanced Wind Magnitude and Bearing Prediction - Onboard Algorithm
Churchill, Lovell, Ball - Coordinating Multiple Traffic Management Initiatives with Integer Optimization	**Harback,** Wojcik, Callaham, Martin, Tsao, Drexler - Applying Economy-wide Modeling to NextGen Benefits Analysis	**Palme** - Radar Cross Section Generation of the Possible Non-Cooperative Targets
Kim, Hansen - Collaborative Rerouting in the Airspace Flow Program: A Framework for User-cost Based Performance Assessment	**Yoon,** Hansen, Ball - Optimal Route Generation with Geometric Recourse Model under Weather Uncertainty	**Senoguchi,** Fukuda - Study on Conflict Detection Method with Downlink Aircraft Parameters
Delgado, Prats - An Optimisation Framework for Aircraft Operators Dealing with Capacity-Demand Imbalances in SESAR	**Vlachou,** Lovell, Rabbani, Bayen - A Diffusion Approximation to a Single Airport Queue	**Mainini** - En Route Air Traffic Control Input Devices for the Next Generation

(10:00, 10:30, 11:00, 12:00 time markers)

12:30 — LUNCH

I Future Concepts and Innovative Ideas II (Chair: Dave Knorr - FAA)	II Human Factors I (Chair: Paul Krois - FAA)	III Airport Design and Operations I (Chair: Vojan Tosic - Uni Belgrade)
Möhlenbrink, Friedrich, Papenfuß, Rudolph, Schmidt, Morlang, Fürstenau - High-Fidelity Human-in-the-Loop Simulations as One Step Towards Remote Control of Regional Airports	**Hurter,** Serrurier, Alonso - An Automatic Generation of Metro-Like Maps to Display Flight Routes for Air Traffic Controllers: Structure and Color Optimization	**Stefanik,** Badanik, Matas - Airport Ground Access and Egress Passenger Flow Model (AGAP)
Weitz - Investigating String Stability of a Time-History Control Law for Airborne Spacing	**Saporito,** Hurter, Gianazza, Beboux - A Participatory Design for the Visualization of Airspace Configuration Forecasts	**Rehwald,** Hecker, Kaufhold - Operational Evaluation of an Airport Centered Flow Management
Kumar, Sherry - Towards Universal Beacon Code Assignment: Spatial and Temporal Analysis of Enroute Traffic in NAS	**Causse,** Dehais, Pastor - Flight Experience and Executive Functions Predict Flight Simulator Performance in General Aviation Pilots	**Matas,** Stefanik, Krollova - Door-to-Gate Air Passenger Flow Model

(1:30, 2:00, 2:30 time markers)

3:00 — TEA BREAK

I Airline Operations & Marketing (Chairs: Jacco Hoekstra - TU Delft)	II Human Factors II (Chair: Dirk Schaefer - ECTRL)	III Airport Design and Operations II (Chair: Senay Solak - UMASS)
Srisaeng - The Responses of Traditional Airlines on Low Cost Airlines	**Causse,** Dehais, Péran, Sabatini, Pastor - Economic Issues Provokes Hazardous Landing Decision-Making by Enhancing the Activity of "Emotional" Neural Pathways	**Atkin,** Burke, Ravizza - The Airport Ground Movement Problem: Past and Current Research and Future Directions
Kara, Ferguson, Hoffman, Sherry - Estimating Domestic U.S. Airline Cost of Delay based on European Model	**Wang,** Vormer, Hu, Duong - Empirical Analysis of Air Traffic Controller Dynamics	**Mori** - Modeling of Aircraft Surface Traffic Flow at Congested Airport Using Cellular Automata
	Vela, Salaun, Burgain, Clarke, Feigh, Feron, Singhose, Solak - Predicting Controller Communication Time for Capacity Estimation	**Lesire** - Iterative Planning of Airport Ground Movements
		Fritzsche, Günther, Fricke - Potential of Dynamic Aircraft to Runway Allocation for Parallel Runways

(3:30, 4:00, 4:30, 5:00 time markers)

7:00 — **ICRAT 2010 GALA DINNER CRUISE ON DANUBE RIVER AND BEST PAPER AWARDS**

	DOCTORAL SYMPOSIUM (JUNE-04)
Fri.	**Chair: Mark Hansen**

8:30	G. **Calderón-Meza** and L. Sherry - Establishing an Upper-Bound for the Benefits of NextGen Trajectory-Based Operations
9:00	B. L. **Luken** and L. A. Garrow - Using Online Data to Investigate Airline Passengers' Multi-Airport Choices
9:30	D. **Rey,** S. Constans, R. Fondacci, and C. Rapine - A Mixed Integer Linear Model for Potential Conflict Minimization by Speed Modulations
10:00	S. **Mumbower,** and L. A. Garrow - Using On-Line Data to Explore Competitive Airline Pricing Policies
10:30	COFFEE BREAK
11:00	A. E. **Sinclair** - Evaluating Light Detection and Ranging (LIDAR) Technology in the Terminal AerodromeEnvironment for Potential Enhancements and Air Traffic Management
11:30	N. **Ahmad** - The Aircraft Sequencing Problem
12:00	M. **Mesgarpour,** C. N. Potts, and J. A. Bennell - Models for Aircraft Landing Optimization
12:30	**CLOSING REMARKS (DAVE LOVELL & VU DUONG - Program co-Chairs)**
12:45	**LUNCH**
	CONFERENCE END