# Best Paper Award List – ATM2011

| Title of Paper | Authors | Award (Track) |
|---|---|---|
| Demonstration of Reduced Airport Congestion through Pushback Rate Control* | • Ioannis Simaiakis<br>• Harshad Khadilkar<br>• Hamsa Balakrishnan<br>• Tom G. Reynolds<br>• R. John Hansman<br>***MIT***<br><br>• Brenda Reilly<br>• Stephen Urlass<br>***FAA*** | Environment and Energy Efficiency<br><br>***Kevin Corker Award for Best Paper of ATM2011 Seminar** |
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| Estimating ATM Efficiency Pools in the Descent Phase of Flight | • Dave Knorr<br>• Xing Chen<br>• Marc Rose<br>• John Gulding<br>***FAA***<br><br>• Philippe Enaud<br>• Holger Hegendoerfer<br>***EUROCONTROL*** | ATM Performance Measurement and Management |
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| The Role of Workload for Work Organization in a Remote Tower Control Center | • Christoph Moehlenbrink<br>• Anne Papenfuss<br>• Jorn Jakobi<br>***DLR*** | Human Factors |
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| A New Approach for Designing Safer Collision Avoidance Systems | • Mykel J. Kochenderfer<br>• James Chryssanthacopoulous<br>• Roland E. Weibel<br>***MIT Lincoln Laboratory*** | Separation |
| | | |
| Performance Evaluation of a Surface Traffic Management Tool for Dallas/For Worth International Airport | • Yoon Jung<br>• Ty Hoang<br>• Justin Montoya<br>***NASA Ames***<br><br>• Gautam Gupta<br>• Waqar Malik<br>• Leonard Tobias<br>***University of California – Santa Cruz***<br><br>• Hua Wang<br>***San Jose State University*** | Integrated Airport/Airside Operations |
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| Contrasting Safety Assessments of a Runway Incursion Scenario by Event | • Sybert H. Stroeve<br>• Henk A.P. Blom | Safety |

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| Sequence Analysis versus Multi-Agent Dynamic Risk Modeling | • G.J. (Bert) Bakker<br>***NLR*** | |
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| A Multi-stakeholder Evaluation of Strategic Slot Allocation Schemes under Airline Frequency Competition | • Vikrant Vaze<br>• Cynthia Barnhart<br>***MIT*** | Network and Strategic Traffic Flow Optimization |
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| Airspace Phase Transitions and the Traffic Physics of Interacting 4D Trajectories | • Bruce K. Sawhill<br>• James W. Herriot<br>• Bruce J. Holmes<br>• Ken Seehart<br>***NextGen AeroSciences, LLC*** | Dynamic Airspace and Capacity Management |
| Airline Based En Route Sequencing and Spacing Field Test Results: Observations and Lessons Learned for Extended Metering | • Peter M. Moertl<br>***MITRE CAASD*** | Enhanced Surveillance and Navigation Applications & Procedures |
| | | |
| Generating Probabilistic Capacity from Weather Forecast: A Design-of-Experiment Approach | • Gurkaran Buxi<br>• Mark Hansen<br>***University of California – Berkeley*** | Weather in ATM |
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| Discovering Delay Patterns in Arrival Traffic with Dynamic Continuous Descent Approaches using Co-Evolutionary Red Teaming | • Sameer Alam<br>• Wenjing Zhao<br>• Jiangjun Tang<br>• Chris Lokan<br>• Hussein Abbass<br>***University of New South Wales***<br><br>• Mohamed Ellejmi<br>• Stephen Kirkby<br>***EUROCONTROL*** | Air Ground Automation Integrated Concepts |
| | | |
| Integrating Best-Equipped Best-Served Principles in Ground Delay Programs | • Andrew M. Churchill<br>• Michael O. Ball<br>***University of Maryland***<br><br>• Alexander David Donaldson<br>• R. John Hansman<br>***MIT*** | Finance and Policy |
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| Dynamically Generating Operationally-Acceptable Route Alternatives Using Simulating Annealing | • Christine Taylor<br>• Craig Wanke<br>***MITRE CAASD*** | Trajectory and Queue Management |
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