

ICRAT 2012 CONFERENCE - at a glance -

Wednesday, May 23

Regular Sessions - Day 1

| | |
|---------|--|
| 7:15 AM | Sign In, Coffee 7:15 - 8:00 AM (Bancroft Hotel) |
| 8:00 AM | PLENARY SESSION: Welcome Address/Opening Keynotes - Sabrina Saunders-Hodge, Dave Young, Hartmut Fricke (Bancroft Hotel) |
| 8:45 AM | Keynote Talk - Bruce Sawhill - "Darwin, Boltzmann, and the Sea of Air" |
| 9:45 AM | AM Break 9:45 - 10:15 (Bancroft Hotel) |

Parallel Sessions/Tracks

| | 212 O'Brien Hall | 406 Davis Hall | 502 Davis Hall |
|----------|---|--|--|
| | Advanced Modeling | Socio-Economic & Institutional Challenges | Human Performance, Safety & Security |
| 10:15 AM | 451 Jones et al. <i>Algorithms for dynamic resequencing of en route flights to relieve terminal congestion</i> | 69 Mahashabde et al. <i>Methodology for assessing tradeoffs between operational and environmental performance in the National Airspace System</i> | 106 Causse et al. <i>An analysis of mental workload and psychological stress in pilots during actual flight using heart rate and subjective measurements</i> |
| 10:55 AM | 128 Rebollo et al. <i>A network-based model for predicting air traffic delays</i> | 371 Swaroop et al. <i>Service expectations setting in air traffic flow management: A consensus-building mechanism</i> | 152 Bourgeois et al. <i>Conditional reduction of ICAO wake turbulence separation minima on final approach</i> |
| 11:35 AM | 151 de Jong et al. <i>Time and energy management during descent and approach for aircraft</i> | 426 Rignér et al. <i>Airline perspective on future automation performance</i> | 212 Z. Wang et al. <i>Sensitivity analysis of potential wake encounters to stochastic flight-track parameters</i> |
| 12:15 PM | Lunch Break 12:15 - 1:30 | | |
| | Advanced Modeling | Air Transport Economics & Policy | Socio-Economic & Institutional Challenges |
| 1:30 PM | 154 Alligier et al. <i>Energy rate prediction using an equivalent thrust setting profile</i> | 97 Badánik et al. <i>Moving passengers by air: at low-fare</i> | 431 Hao et al. <i>New York, New York: Two ways of estimating the delay impact of New York airports</i> |
| 2:10 PM | 216 Fricke et al. <i>Automated 4D path optimization using the enhanced trajectory prediction model (ETPM)</i> | 200 Jovanović et al. <i>Self-financing modulation of air navigation charges to incentivise a more efficient use of airspace capacity</i> | 442 Kim et al. <i>The effects of user competition in air traffic management initiatives</i> |
| 2:50 PM | 319 Omer et al. <i>Automating air traffic control through nonlinear programming</i> | 342 Liu et al. <i>Performance trades and cost optimization in ground delay programs: single airport case</i> | Human Performance, Safety & Security 387 Thiel et al. <i>Simulative assessment of reduced lateral separation minima for the terminal airspace</i> |
| 3:30 PM | 331 Jacquillat et al. <i>A study of airport congestion at JFK and EWR</i> | 414 Woodburn et al. <i>Modeling aircraft performance: A comparison of PIANO and airline fuel consumption</i> | 391 Schelbert et al. <i>Adapting enroute ATM complexity metrics for terminal airspace safety assessments</i> |
| 4:10 PM | PM Break 4:10 - 4:40 (O'Brien Breezeway Patio, just outside of O'Brien Hall & Davis Hall) | | |
| | Advanced Modeling | Airport Design & Operations | Human Performance, Safety & Security |
| 4:40 PM | 349 Nayak et al. <i>Estimation of flight delay propagation of the regional airport systems in the U.S.</i> | 386 Oreschko et al. <i>Turnaround prediction with stochastic process times and airport specific delay pattern</i> | 356 Wilke et al. <i>Assessing the quality of aviation safety databases: An external data validation framework</i> |
| 5:20 PM | 422 Churchill et al. <i>Using dynamic airspace configuration in the terminal area to enable optimal profile descents</i> | 227 Simaiakis et al. <i>Design, testing and evaluation of a pushback rate control strategy</i> | 378 Belle et al. <i>Estimation of potential conflict rates as a function of sector loading</i> |
| 7:00 PM | Conference Committee Dinner Bistro Liaison | | |

ICRAT 2012 CONFERENCE - at a glance -

Thursday, May 24

Regular Sessions - Day 2

8:15 AM Sign In, Coffee 8:15 - 8:45 pm (**Bancroft Hotel**)

8:45 AM **PLENARY SESSION: Welcome Address - Sabrina Saunders-Hodge (Bancroft Hotel)**

8:50 AM **Keynote Talk - Karlin Toner - "ATM Research - Challenges for the Decade Ahead"**

9:50 AM **AM Break 9:50 - 10:15 (Bancroft Hotel)**

Parallel Sessions/Tracks

212 O'Brien Hall

406 Davis Hall

502 Davis Hall

| | CNS / ATM Decision Support Tools | Future Concepts | Airline operations, QOS & marketing |
|----------|---|--|--|
| 10:15 AM | 376 Rey et al. <i>Assessing the impact of a speed regulation based conflict resolution algorithm on air traffic flow</i> | 379 Enriquez et al. <i>A simple and robust flow detection algorithm based on spectral clustering</i> | 351 Zhang et al. <i>Where to launch a new passenger air route between China and the U.S.</i> |
| 10:55 AM | 100 Bloem et al. <i>Evaluation of algorithms for a Miles-In-Trail decision support tool</i> | 450 Orrell et al. <i>Effects of primary TIS-B on the general aviation pilot: A human-in-the-loop simulation</i> | 418 Michel et al. <i>Airline alliances: Effects on total revenues of sharing estimated network value of unsold seats</i> |
| 11:35 AM | | 457 Schachtebeck et al. <i>Impact of ground resource allocation principles on airport ground delays</i> | 423 Seelhorst et al. <i>Flight cancellation behavior and delay savings</i> |
| 12:15 PM | Lunch Break 12:15 - 1:30 | | |
| 1:30 PM | 162 Allignol et al. <i>Optimized flight level allocation at the continental scale</i> | 334 Rosenow et al. <i>Modeling contrail life cycles based on highly precise flight profile data of modern aircraft</i> | 434 Campbell et al. <i>Real world turboprop market viability: New turboprop markets for Alaska Airlines</i> |
| 2:10 PM | 201 Delgado et al. <i>ATFM airborne delays without extra fuel consumption in wind conditions</i> | 410 Ryerson et al. <i>Validating aircraft performance models with airline data</i> | Human Performance, Safety & Security 411 Thiel et al. <i>Safety monitoring of new implemented approach procedures by means of radar data analysis</i> |
| 2:50 PM | 213 Corolli et al. <i>The impact of uncertain departure delays on flight flexibility</i> | 429 Buxi et al. <i>Optimal 4-D aircraft trajectories in a contrail sensitive environment</i> | 229 Ruiz et al. <i>Computational efficient conflict detection and resolution through spatial data structures</i> |
| 3:30 PM | 339 Pérez-Batlle et al. <i>Evaluation of separation strategies for Unmanned Aerial Systems</i> | 452 Yoon et al. <i>Value of better weather information in the probabilistic air traffic flow management: An application of the geometric recourse model (GRM)</i> | 329 Vanaret et al. <i>Benchmarking Conflict Resolution Algorithms</i> |
| 4:10 PM | PM Break 4:10 - 4:40 (O'Brien Breezeway Patio, just outside of O'Brien Hall & Davis Hall) | | |
| 4:40 PM | Advanced Modeling 424 Rodionova et al. <i>Optimization of aircraft trajectories in North Atlantic oceanic airspace</i> | Airport Design & Operations 253 Moehlenbrink et al. <i>Using the entropy of multi-aircraft departure time distributions to predict temporal deviations from on-time departure performance</i> | Human Performance, Safety & Security 396 Dupuy et al. <i>The management of separation-related incidents by air traffic control</i> |
| 5:20 PM | 453 Wang et al. <i>Ration-by-weight of efficiency and equity</i> | | 401 Ye et al. <i>Risk-capacity tradeoff analysis of an en-route corridor model</i> |
| 7:00 PM | Gala Dinner UC Faculty Club | | |



| ICRAT 2012 CONFERENCE - at a glance - | | |
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| Friday, May 25 | | |
| Doctoral Symposium (Bancroft Hotel) | | |
| 7:45 AM | | Sign In, Coffee 7:45 - 8:15 (Bancroft Hotel) |
| 8:15 AM | 405 | Capacity Estimation for the Single European Sky - Tobaruela |
| 8:45 AM | 138 | A Contribution to the Analysis of an Air Navigation Service Provider based on System Dynamics - Kreuz |
| 9:15 AM | 148 | ATM and Volcanic Ash: An advanced approach to the adversely event - Vujasinović |
| 9:45 AM | 126 | Got Game? Is 3D the future or a blast from the past? - Young |
| 10:15 AM | | AM Break 10:15 - 10:45 AM (Bancroft Hotel) |
| 10:45 AM | 218 | Air transportation network robustness optimization under limited legs itinerary constraint – Nagarajan, Wei, Rathinam, & Sun |
| 11:15 AM | 263 | The spatial differentiation of air freight demand Germany - Horn |
| 11:45 AM | 122 | Delay Analysis for the RNAV Approach Procedure at Istanbul Yesilkoy TMA Using SIMMOD – Aybek & Cavcar |
| 12:15 PM | 180 | Formal Modeling of Trajectory Prediction Uncertainty for Future Trajectory Based Operations - Casado, Goodchild & Vilaplana |
| 12:45 PM | | CLOSING REMARKS |

