# Monday, 3 December 2018

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>12:00</td>
<td>Registration opens and will remain open throughout the conference and exhibition</td>
<td></td>
</tr>
<tr>
<td>12:45 – 17:15</td>
<td>ASDA Series of Tournaments 2018</td>
<td>Salzburg Congress Centre, 4th floor, Room: Doppler Saal</td>
</tr>
</tbody>
</table>
| 14:00 – 17:00 | GATEMAN workshop                                                  | Natural Sciences (NaWi) Faculty, A-5020 SALZBURG,  
                     |                                                                         | Hellbrunnerstraße 34, Room 413                                    |
|        | EMPHASIS Workshop                                                   | Natural Sciences (NaWi) Faculty, A-5020 SALZBURG,  
                     |                                                                         | Hellbrunnerstraße 34, Room 424                                    |

**Cocktail and official opening of the poster exhibition**

- Florian Guillermot, Executive Director, SESAR JU
- Jeff Poole, Director General, CANSO
- Maria Algar Ruiz, UTM - SESAR Coordinator, EASA
- Andrew Cook, Coordinator, Engage network

**Location:** Salzburg Congress Centre, first floor
## Tuesday, 4 December 2018

**8:30 – 9:00**  
**Welcome coffee**

**9:00 – 9:20**  
**Welcome and opening**  
- Vicerector Ferreira-Briza, University of Salzburg  
- Elisabeth Landrichter, Director General, Austrian Civil Aviation Authority

**9:20 – 10:00**  
**Keynotes**  
- Filip Cornelis, Director Aviation, DG MOVE, European Commission  
- Philippe Merlo, Director ATM, EUROCONTROL  
- Florian Guillermet, Executive Director, SESAR JU

**10:00 – 10:45**  
**Engage network**  
- Andrew Cook, Coordinator, Engage network  
- Paula López, Consortium Member, Engage network  
- Tatjana Bolic, Consortium Member, Engage network  
- Dirk Schaefer, SIDs Programme Committee Chair

*(The welcome and keynote sessions will take place in the Karajan Hall)*

**10:45 – 11:15**  
**Coffee & Exhibition**

### Machine Learning I

- **Chair:** Jacco Hoekstra, TU Delft
  - Flight Level Prediction with a Deep Feedforward Network  
    - **Matthias Poppe,** DFS
  - Automated Data-Driven Prediction of Aircraft Estimated Time of Arrival  
    - **Zhengyi Wang,** ENAC
  - A Boosted Tree Framework for Runway Occupancy and Exit Prediction  
    - **Dario Martinez,** Innaxis

*(LOCATION: Karajan Hall)*

### Airports

- **Chair:** Sara Bagassi, University of Bologna
  - Identification of Complexity Factors for Remote Towers  
    - Christiane Schmidt, Linköping University
  - Stochastic Control of Turnarounds at HUB-Airports  
    - Jan Evler, TU Dresden
  - SESAR 1 Solutions Implementation Key Feature - High Performing Airport Operations  
    - Doroteja Timotic, University of Belgrade

*(LOCATION: Wolf-Dietrich Hall)*
<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
</tr>
</thead>
<tbody>
<tr>
<td>13:00 – 14:00</td>
<td><strong>Lunch and exhibition</strong></td>
</tr>
</tbody>
</table>
| 14:00 – 15:45| **Data-driven Techniques**  
*Chair: Marc Bourgois, EUROCONTROL*  
Smart Data Fusion: Probabilistic Record Linkage adapted to Merge Two Trajectories from Different Sources  
*Darío Martínez, Innaxis*  
Visual Analytics of Flight Trajectories for Uncovering Decision Making Strategies  
*Gennady Andrienko, Fraunhofer Institute IAIS*  
Aircraft Atypical Approach Detection using Functional Principal Component Analysis  
*Gabriel Jarry, ENAC*  
*(LOCATION: Karajan Hall)*  
**Economics and legal**  
*Chair: Rita Markovits-Somogyi, HungaroControl*  
Decision Support for an Optimal Choice of Subsidised Routes in Air Transportation  
*Alan Kinene, Linköping University*  
Shared Airspace, Shared Liability?  
*Ivo Emanuilov, KU Leuven*  
Introducing Competition through Auctions in the Air Traffic Control Market  
*Nicole Adler, Hebrew University of Jerusalem*  
*(LOCATION: Wolf-Dietrich Hall)* |
| 15:45 – 16:15| **Coffee and exhibition**                                               |
| 16:15 – 17:45| **Plenary session 1: ATM research in the global perspective**  
- Ho Wei Sean, CAAS, Singapore  
- Parimal Kopardekar, NASA  
- Saulo Da Silva, ICAO  
- Steve Bradford, FAA  
- Tokuaki Nakajima, ENRI Japan  
*Moderated by Michael Standar, Chief Strategy & External Affairs, SESAR JU*  
*(LOCATION: Karajan Hall)* |
| 17:45 – 19:00| **Posters and Exhibits Cocktail**                                       |
### Wednesday, 5 December 2018

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:00 – 9:30</td>
<td><strong>Keynote on the Human Factor in ATM R&amp;D</strong>&lt;br&gt;• Tom Laursen, EVP Europe, IFATCA&lt;br&gt;• Toni Waefler, IFATCA</td>
</tr>
</tbody>
</table>
| 9:30 – 11:00 | **Plenary session 2: Transport research into implementation**<br>• Carlo Borghini, Executive Director, Shift2Rail<br>• Georg Trausmuth, Head of Corporate Research, Frequentis<br>• Eric Nantier, Director Operations Control Process, Lufthansa Group<br>• Olaf Dlugi, Chairman of the Industry Consultation Body<br>• Tanja Grobotek, CANSO Europe Director<br>  
  *Moderated by Peter Hotham, Deputy Director, SESAR JU* |
| 11:00 – 11:15 | **Artistic Interlude**<br>(Morning sessions to take place in the Karajan Hall)                                |
| 11:15 – 11:45 | **Coffee & exhibition**                                                                                        |
| 11:45 – 13:00 | **UTM and UAS**<br>*Chair: Francisco Saez, Cranfield University*<br>Drone Delivery: Urban Airspace Traffic Density Estimation<br>*Jacco Hoekstra, TU Delf*  
  **Meteo and Environment**<br>*Chair: Damian Rivas, University of Seville*<br>Optimal Aircraft Path Planning in a Structured Airspace Using Ensemble Weather Forecasts<br>*Antonio Franco, University of Seville*<br>  
  *Mitigation potential of environmental optimized aircraft trajectories using climate metrics*<br>*Sigrun Matthes, DLR*<br>(LOCATION: Wolf-Dietrich Hall) |
| 13:00 – 14:30 | **Lunch & exhibition**                                                                                         |
### Wednesday, 5 December 2018

**Machine Learning II**  
Chair: TBC

- Airline Disruption Management with Aircraft Swapping and Reinforcement Learning  
  *Gabriel Hondet, ENAC*

- Application of Machine Learning for ATM Performance Assessment – Identification of Sources of En-Route Flight Inefficiency  
  *Rodrigo Marcos, Nommon*

- Detecting Controllers’ Actions in Past Mode-S Data by Autoencoder-Based Anomaly Detection  
  *Xavier Olive, ONERA*

**Airspace Design and Management**  
Chair: Daniel Delahaye, ENAC

- Free Route Airspaces in Functional Air Space Blocks  
  *Judith Rosenow, TU Dresden*

- Tactical Prediction of the Number of Control Positions with Softmax Regression and Tree Search  
  *Judicaël Bedouet, ONERA*

- The Effects of the Introduction of Free Route in the Hungarian Airspace  
  *Fanni Kling, HungaroControl*

(LOCATION: Karajan Hall)  
(LOCATION: Wolf-Dietrich Hall)

### NETWORKING DINNER
**Wednesday, 5 December 2018**

- **Hangar 7 Museum**  
  *Wilhelm-Spazier-Straße 7a, 5020 Salzburg*

  Please note that there will be participant fee of 35 EUR to be paid in advance on-site during the main event.

  Busses to the Hangar 7 museum will depart at 18:30 from outside the Salzburg Congress Centre
### Thursday, 6 December 2018

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:30 – 11:00</td>
<td><strong>Modelling and Simulation</strong>&lt;br&gt;<em>Chair: Lorenzo Castelli, University of Trieste</em>&lt;br&gt;Assessment of Future Air Traffic Management System Safety Performances using a Network-based Simulation Model&lt;br&gt;<em>Fedja Netjasov, University of Belgrade</em>&lt;br&gt;Towards New Metrics Assessing Air Traffic Network Interactions&lt;br&gt;<em>Silvia Zaoli, University of Bologna</em>&lt;br&gt;Aircraft Drag Polar Estimation Based on a Stochastic Hierarchical Model&lt;br&gt;<em>Junzi Sun, TU Delft</em></td>
</tr>
<tr>
<td>11:00 – 11:30</td>
<td><strong>Flow Management</strong>&lt;br&gt;<em>Chair: Radosav Jovanovic, University of Belgrade</em>&lt;br&gt;Occupancy Peak Estimation from Sector Geometry and Traffic Flow data&lt;br&gt;<em>Luis Basora, ONERA</em>&lt;br&gt;Coordinated Capacity and Demand Management in the European Core Area: Results of a Large-scale COCTA Case Study&lt;br&gt;<em>Nikola Ivanov, University of Belgrade</em>&lt;br&gt;Arrival Trade-offs Considering Total Flight and Passenger Delays and Fairness&lt;br&gt;<em>Luis Delgado, University of Westminster</em></td>
</tr>
</tbody>
</table>

*(LOCATION: Karajan Hall)*

*(LOCATION: Wolf-Dietrich Hall)*

11:00 – 11:30 Coffee & exhibition
Thursday, 6 December 2018

**Controller Assistance Systems**
*Chair: Luis Delgado, University of Westminster*

- Building Blocks of Assistant Based Speech Recognition for Air Traffic Management Applications
  *Matthias Kleinert, DLR*

- Hotspot Resolution with Sliding Window Capacity Constraints using the Path&Cycle Algorithm
  *Andreas Nakkerud, University of Oslo*

- The Semantic Container Approach: Techniques for Ontology-based Data Description and Discovery in a Decentralized SWIM Knowledge Base
  *Bernd Neumayr, University of Linz and Eduard Gringinger, Frequentis*

*(LOCATION: Karajon Hall)*

**Performance**
*Chair: Dirk Schaefer, EUROCONTROL*

- Open Flight Trajectories for Reproducible ANS Performance Review
  *Enrico Spinielli, EUROCONTROL*

- A Multi-layer Model for Long-term KPI Alignment Forecasts
  *Gérald Gurtner, University of Westminster*

- Enhanced Indicators to Monitor ATM Performance in Europe – Main findings of the APACHE Project
  *Xavier Prats, UPC*

*(LOCATION: Wolf-Dietrich Hall)*

**13:00 – 14:00 Lunch & exhibition**

**Panel 3: Women in Aviation Research**
- Elisabeth Kotthaus, European Commission, DG MOVE
- Rita Markovits-Somogyi, Hungarocontrol
- Alison Roberts, NATS
- Sara Bagassi, University of Bologna

*Moderated by Tanja Bolic, SJU Scientific Committee*
Thursday, 6 December 2018

15:00 – 15:30 Coffee break & exhibition

15:30 – 16:00 Look ahead from the Engage network
   • Andrew Cook, Coordinator, Engage network

16:00 – 16:30 SESAR Young Scientist Award Ceremony

16:30 – 17:00 Closing keynote
   • Florian Guillermet, Executive Director, SESAR JU

Friday, 7 December 2018

SITE VISITS

• TOUR 1: Salzburg Area (Salzburg University, Salzburg Airport, Hangar 8, Austrian Airforce)

• TOUR 2: Vienna (Frequentis, University of Vienna)

• TOUR 3: Vienna (Austrian Airlines, Austrocontrol)

(You must be pre-registered to attend these tours, please speak to someone at the SIDS registration desk should you wish to attend)