



At the core of the Engage KTN is the definition of various thematic challenges: new ideas suggested by the research community, not already included within the scope of an existing SESAR project. They are developed along with the ATM concepts roadmap and complementarily with some of the network's PhDs and theses.

Thematic challenge 2

Data-driven trajectory prediction



2nd workshop programme

Edition 1.0, 29 November 2019

Workshop date: **02 December 2019**
Host: National Centre of Scientific Research 'Demokritos'
Address: Athens, Greece (co-located with SIDs)
Web details for access: <https://www.sesarju.eu/sesarinnovationdays>

Programme

0930-1000 Welcome coffee

1000-1015 ***Welcome and overview from the Engage KTN; results of the 2018 workshop***

Dirk Schaefer (EUROCONTROL) and Andrew Cook (University of Westminster)

SESSION 1 (1015-1145): Engage catalyst-funded projects (chair Dirk Schaefer)

1015-1045 ***Data-driven trajectory imitation with reinforcement learning***
Theocharis Kravaris (University of Piraeus)

1045-1115 ***A Data-driven approach for dynamic and Adaptive trajectory Prediction ('DIAPasON')***
Manuel Cordero (CRIDA)

1115-1145 ***An interaction metric for an efficient traffic demand management: requirements for the design of data-driven protection mechanisms***
Juan José Ramos (Aslogic)

1145-1215 ***Discussion on problems and opportunities***

1215-1315 ***Lunch***

SESSION 2 (1315-1500): Engage PhDs (chair Luis Delgado)

1315-1335 ***Trajectory planning for conflict-free trajectories: a multi agent reinforcement learning approach ('RL4CFTP')***
Alevizos Bastas (University of Piraeus)

1335-1355 ***Machine Learning Techniques for Seamless Traffic Demand Prediction***
Manuel Mateos (Nommon)

1355-1415 ***Machine Learning Applications to Extend AGENT's conflict resolution capabilities***
Ralvi Isufaj (Autonomous University of Barcelona)

1415-1435 ***Advanced Statistical Signal Processing for Next Generation Trajectory Prediction***

Homeyra Khaledian (Technical University of Catalonia)

1435-1455 ***Integrating weather prediction models into ATM planning ('IWA')***

Anastasia Lemetti (Linköping University)

1455-1515 ***Discussion on problems and opportunities***

1515-1530 ***Coffee break***

SESSION 3 (1530-1630): Facilitated brainstorming

1530-1615 ***Identification of areas of collaboration and opportunities***

1615-1630 ***Wrap-up and close-out***

Dirk Schaefer (EUROCONTROL) and Andrew Cook (University of Westminster)



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