ATACCS' 2013

3rd International Conference on Application and Theory of Automation in Command and Control Systems

28 - 30 May 2013, Naples, Italy

Conference Programme

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Plenary Opening Session Day 1

08:30-09:30	Registration & Coffee	
09:30-10:00	Chairs' Welcome.	**Prof. Antonio Moccia** Università degli Studi di Napoli Federico II **Prof. Francisco Sáez** , UPM/HALA
	Introduction to the Programme.	**Alberto Pasquini** Deep Blue
10:00-11:00	Keynote: "Avionic technologies and automation for manned and unmanned aircraft in the future ATM scenario	**Pasquale Schiano**,CIRA
		Giuseppe Maresca, Selex-ES
11:00-11:25	Networking Coffee Break & Poster session	

Session 1: Human-Automation Collaboration   (Session Chair: Prof. Lena Mårtenson)

11:25-11:50	Model-Based Dynamic Distribution of User Interfaces of Critical Interactive Systems	David Navarre, **Célia Martinie, Philippe Palanque** (IRIT), / Alberto Pasquini and Martina Ragosta (Deep Blue)
11:50-12:15	Assessment of impact of Degree of Automation on Human Roles: The Experts' Analysis using Gaming	**Rosana Casar (Isdefe)**, Raquel Garcia (CRIDA), Reiner Suikat (DLR) , Rolf Zon (NLR)
12:15-12:40	Aviation Safety: Modeling and Analyzing Complex Interactions between Humans and Automated Systems	**Franco Raimondi** (Middlesex University) / Neha Rungta, Guillaume Brat, William Clancey, Charlotte Linde, Chin Seah and Michael Shafto (NASA Ames Research Center)
12:40-13:50	Lunch	

Session 2: Strategic Trajectory Planning (Session Chair: Pim van Leeuwen)

13:50-14:15	4D trajectory planning in ATM with a anytime stochastic approach	Jose Antonio Cobano, **David Alejo**, Guillermo Heredia and Anibal Ollero (University of Seville)
14:15-14:40	Multiphase Mixed-Integer Optimal Control applied to 4D Trajectory Planning in Air Traffic Management	Alberto Olivares, **Manuel Soler** and Ernesto Staffetti (Rey Juan Carlos University)
14:40-15:05	Effect of Flight Plans Predictability and Accuracy on Traffic Demand Forecast	**Esther Calvo Fernández** and Jose Manuel Cordero (CRIDA)
15:05-15:35	Poster Teaser Session (Session Chair: Dr. Thomas Feuerle)	
15:35-15:55	Networking Coffee Break & Poster session	

PhD Session I: 4DTrajectory Optimisation (Session Chair: Prof. Chris Johnson)

15:55-16:00	Introduction by Prof. Chris Johnson	
16:00-16:25	Modeling external disturbances for aircraft in flight to build reliable 4D trajectories	**Tobias Pabst**, Thomas Kunze, Hartmut Fricke and Michael Schultz (TU Dresden)
16:25-16:50	Effects in fuel consumption of assigning RTAs into 4D trajectory optimisation upon departures	**Santi Vilardaga** (CTAE) and Xavier Prats (Technical University Catalonia)
16:50-17:15	An approach for efficient Aircraft Turnaround Operations using automated decision support	**Thomas Kunze**, Michael Schultz and Hartmut Fricke (TU Dresden)
17:15-18:00	Cocktail, Networking & Poster session	

Plenary Opening Session Day 2		
08:00-08:30	Registration & Coffee	
08:30-08:45	Introduction to the Programme. Day 2.	**Domenico Accardo** Università degli Studi di Napoli Federico II
08:45-09:45	Keynote Speakers	**Antonio Chialastri**, Head pilot at Alitalia and expert in Human Factors
09:45-10:45	HALA! Position Paper: A COMPLETE PARADIGM SHIFT IN AUTOMATION IN ATM.	
10:45-11:15	Networking Coffee Break & Poster session	
Session 3: Trajectory Optimization (Session Chair: Dr. Xavier Prats)		
11:15-11:40	Transforming Time - Towards an intuitive time constraint depiction	**Jendrick Westphal**, Uwe Klingauf (TU Darmstadt), Nima Barraci and Jens Schiefele (Jeppesen GmbH)
11:40-12:05	Multiobjective Pre-tactical Planning Under Uncertainty for Air Traffic Control	**Gaetan Marceau-Caron**, Marc Schoenauer (INRIA Saclay) and Pierre Savéant (Thales R&D)
12:05-12:30	Modeling aircraft pushback trajectories for safe operations	**Franziska Dieke-Meier**, Thomas Kalms, Hartmut Fricke and Michael Schultz (TU Dresden)
12:30-13:45	Lunch	
Session 4: Unmanned Aircraft Systems & Collision Avoidance (Session Chair: Dr. Marco Winckler)		
13:45-14:10	Autonomous management of an UAV airfield	Rosa Rodriguez (Boeing R&T Europe), Francisco Alarcón, **Daniel Santamaría** (FADA-CATEC)and Anibal Ollero (AICIA)
14:10-14:35	Automated Support to Separation Assurance: a common design approach for General Aviation and Remotely Piloted Aircraft Systems	**Damiano Taurino**, Stefano Bonelli and Marco Ducci (Deep Blue)
14:35-15:00	Development of Numerical Sensor Models for Cooperative and Non-cooperative Collision Avoidance	Anna Elena Tirri, Giancarmine Fasano, **Domenico Accardo**, Antonio Moccia (University of Naples "Federico II") and Vincenzo Baraniello (CIRA)
15:00-15:30	Poster Teaser Session (Session Chair: Dr. Thomas Feuerle)	
15:30-15:55	Networking Coffee Break & Poster session	
PhD Session 2: Autonomy and Automation (Session Chair: Prof. Hartmut Fricke)		
15:55-16:00	Introduction by Prof. Hartmut Fricke	
16:00-16:25	A multi-modelS based approach for the analysis and design of usable and resilient partly autonomous interactive systems	**Martina Ragosta** (IRIT, DeepBlue)
16:25-16:50	Context-Aware Adaptive Automation in ATC	**Gustavo** Mercado (To70 B.V)
16:50-17:15	AUTOFLY-Aid: Multi-Modal Trajectory Projection Approach for Airborne Collision Detection and Avoidance	**Emre Koyuncu**, Gokhan Inalhan (Istanbul Technical University) and Eduardo Garcia (UPM/CRIDA).
17:15-18:00	Cocktail, Networking & Poster session	
Conference Dinner		

ATACCS' 2013
Conference Programme

Conference Day 3, Thursday 30th May 2013

Plenary Opening Session Day 3

08:00-08:30	Registration & Coffee	
08:30-08:35	Introduction to the Programme. Day 3	**Eduardo García** CRIDA/ Technical University of Madrid
08:35-09:25	Keynote Speaker	**Dr. Felix Schill**, Researcher at Ecole Polytechnique Fédérale Lausanne (EPFL)
09:25-09:40	Message from the Rector	**Prof. Massimo Marrelli,** Rector of the University of Naples Federico II

Session 5: Learning from Other Domains   (Session Chair: Alberto Pasquini)

9:40-9:50	Introduction by Alberto Pasquini	
09:50-10:15	Flying by the seat of their pants: What can High Frequency Trading learn from aviation?	**Gordon Baxter** (University of St Andrews) and John Cartlidge (University of Bristol)
10:15-10:40	The Legal Case	Giuseppe Contissa, , **Giovanni Sartor**, Hanna Schebesta (European University Institute), Paola Lanzi, Migle Laukyte, Patrizia Marti and Paola Tomasello (DeepBlue)
10:40-11:05	Networking Coffee Break & Poster session	

PhD session 3: Decision Support and Tools (Session Chair: Prof. Chris Johnson & Prof. Hartmut Fricke)

11:05-11:10	Introduction by Prof. Chris Johnson & Prof. Hartmut Fricke	
11:10-11:35	Property-Graph-Based Knowledge Representation for Decision Support Systems	**Lutz Bretschneider** and Peter Hecker (TU Braunschweig)
11:35-12:00	Sensitivity of Continuous Climb Departure Predictions to Aircraft Intent Uncertainties	**Enrique Casado**, Miguel Vilaplana (Boeing R&T Europe) and Colin Goodchild (University of Glasgow)
12:00-12:25	Distance at closest Point of Approach for Airborne Collision Avoidance	**Anna Elena Tirri**, Giancarmine Fasano, Domenico Accardo and Antonio Moccia (University of Naples "Federico II")
12:25-12:45	Networking Break & Poster session	

Awards and Closing Remarks

12:45-13:15	Best Poster Award, Best Research Paper Award, Boeing's Best PhD Paper Award Wrap-Up and Close
13:15-...	Lunch

ATACCS' 2013
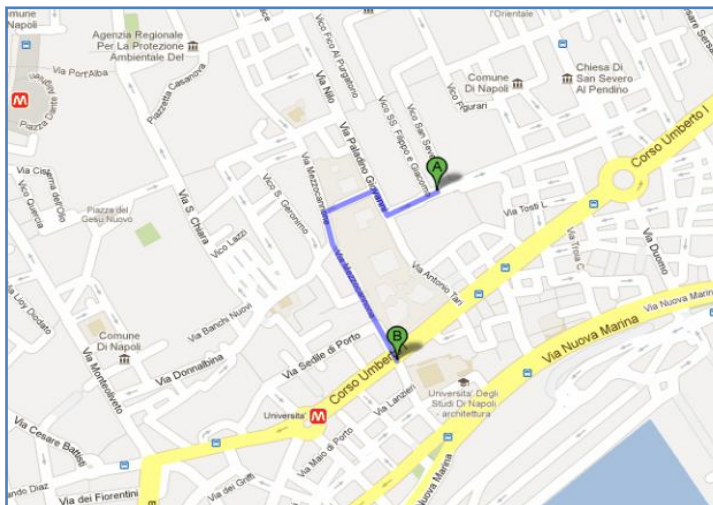# Conference Programme

Registration

The attendance to ATACCS is free of charges. However, for the purpose of organization, attendees and authors are required to register online via www.ataccs.org.

Conference Venue

First two days (28-29 May 2013)

The conference ATACCS will be held a the "Complesso dei SS. Marcellino e Festo" (A in the Map). This is an old refurbished monastery that is own by UNINA since 1901. It is very well placed at Largo S. Marcellino 10 - Napoli. It is located in the ancient part of Naples, next to the most interesting attractions for tourism. Even the seaport to get to the islands is at walk distance.

Third day (30 May 2013)

The third day, the conference will take place at the Historical Lecture Hall of the University of Naples Federico II. It is one of the places that are strongly related of the history of the University. It is located on the 2nd floor of the central building of the University of Naples "Federico II" - Corso Umberto I (B in the Map).

In case of any **further questions** on the conference, please contact **the local organisation committee**: **Prof. Domenico Accardo,** Email: domenico.accardo@unina.it