



5th SCAD (Symposium on Collaboration in Aircraft Design) (12th -14th October, 2015)

Hosted by University of Naples Federico II, Dept. of Industrial Engineering
AULA MAGNA Congress Centre of University of Naples, Via Partenope 36, NAPLES

AGENDA

Day 1 (Monday, 12th October)

AULA MAGNA Congress Centre Via Partenope 36, NAPLES

- Morning –

09:00 - 09:10 Introduction to 5th SCAD Workshop (F. Nicolosi)

09:10 - 09:40 Welcome

Prof. A. Moccia (Head of Department of Industrial Engineering, “University of Naples Federico II”)

Prof. L. Carrino (President of CIRA and President of Campania Region Aerospace District)

09:40 - 10:00 Aircraft Design in Tecnam (F. Russo, Costruzioni Aeronautiche Tecnam)

10:00 - 10:20 Design challenges of high endurance MALE UAV (S. Mancino, Piaggio Aerospace)

Coffee Break (10.20-11.00)

Session on Innovative propulsive systems (CHAIRMAN F. Nicolosi)

11:00 - 12:00 **Invited Lecture**

“Distributed Electric Propulsion Aircraft” (Dr. M. Moore, NASA Langley)

12:00 – 12:20 Ivchenko-Progress innovations for turboprop engines (S. Dmytryev, Ivchenko)

12.20 - 12.40 *Questions and discussions*

Lunch 12.40 - 14.10

- Afternoon –

Session on Aircraft Configuration (CHAIRMAN P. Schmollgruber)

14:10 - 14.30 Nova Configuration (O. Atinault, Onera)

14.30 - 14.50 Box Wing A/C design (A. Frediani, F. Oliviero, University of Pisa)

14:50 - 15:10 Aircraft Preliminary Design in Alenia Aermacchi (Ing. P. Iaia, Alenia Aermacchi)

15.10 - 15.30 New configurations at DLR (DLR)

15.30 - 16.00 *Open Discussion on Aircraft Configurations*

Coffee Break (16.00-16.30)

16:30 - 16:50 MDO for aircraft design at Bombardier (Pat Piperni, Bombardier)

16:50 - 17.10 Challenges for new regional turboprop configuration (P. Della Vecchia, UNINA)

17.10 - 17.45 *Open discussion Day 1*

17.45 - 18.00 *Final considerations Day 1*



Day 2 (Tuesday, 13th October)

AULA MAGNA Congress Centre Via Partenope 36, NAPLES

- Morning –

Session on Methods and Tools (CHAIRMAN A. Rizzi)

- 08:30 - 08:50 Multiphysics Aircraft AeroelaSTicity (M. Franciolini, Univ. of Southampton)
- 08:50 - 09:10 Recent Advances in Variable Fidelity MDO Framework for Collaborative & Integrated Aircraft Config. Development – CEASIOM (A. Rizzi, KTH Stockholm)
- 09:10 - 09:30 Recent developments on AcBuilder, NeoCASS and PyPAD tools: toward a multi-fidelity aeroelastic framework for conceptual and preliminary aircraft design. (S. Ricci, POLIMI)
- 09:30 - 09:50 The stability of join-wing configuration within optimization procedure (T. Grabowsky, University of Warsaw, Poland)
- 09:50 - 10:10 Smart Aircraft Modeler for aircraft conceptual design (W. Anemaat, DARCORP)
- 10:10 - 10:30 *Open discussion on methods and tools*

Coffee Break (10.30-11.00)

- 11:00 - 11:20 ASTRID, Aircraft System Design Tool (M. Fioriti, Politecnico di Torino)
- 11:20 - 11:50 Reference Aircraft (F. Schültke RWTH Aachen University)
- 11:50 - 12:20 *Open discussion on application of tools on Reference Aircraft*
- 12:20 - 12:35 About possible European project on Methods&Tools (F. Nicolosi, UNINA)

Session on key-Technologies (CHAIRMAN B. Nagel)

- 12:40 - 13:00 A Java Framework for Aircraft Design. Software engineering best practices applied to aerospace science. (A. De Marco, University of Naples)

Lunch 13.00 - 14.00

Afternoon –

Session on key-Technologies (CHAIRMAN B. Nagel)

- 14:00 - 14:15 Smart Structures (A. Concilio, CIRA)
- 14:15 - 14:30 Innovative aerodynamic technologies (G. Mingione, CIRA)

14:30 - 16:00 Interactive session ("world cafe" format) with three discussion group on configurations, key technologies and methods and tools.

Coffee Break (15.00-16.00) will be available during Interactive session

- 16:00 - 16:20 Summary of the 5th SCAD (F. Nicolosi)
- 16:20 - 16:40 Review of the activity and competence map (B. Nagel)
- 16:40 - 17:00 Decision about next meeting (P. Schmollgruber)

- 18:00 BUS leaving from Hotel Royal for a social event in the Center of Naples
- 18:30-23:00 Social Event (Visit to S. Lorenzo) and Dinner



Day 3 (Wednesday, 14th October)
(TECHNICAL TOUR)

08:00 – 14:00 Technical tour to CIRA (Italian Aerospace Research Center) and Tecnam Aircraft Company

The BUS will leave at 08:00 from the entrance of Hotel Royal Continental.