

MDO 2022 Agenda

DAY 1		Technical Topics	Speakers
9h00	Welcome + Coffee		
9h30	Introduction from ONERA		ONERA, P. Bidaud
10h00	Introduction from PSIA2		PSIA2, A. Tanguy
10h30	Key Note 1 (40 min.)	Green Aviation in Europe	V. Selmin (CAJU, CleanSky outcomes overview and perspectives for Clean Aviation)
11h10	Coffee		
11h30	Technical session 1 (3 slots)	Share high-level (selected) roadmaps information Panel from institutes and industries	M. Ferrogali (Airbus, Roadmap for MDO) C. Rey (SAFRAN, Design by simulation: few trends, current challenges, towards new engineering practices) G. Rogé (Dassault Aviation, How is Dassault Aviation preparing eco-friendly business jets for take-off ?)
12h30	Buffet Lunch		
14h00	Technical session 2 (5 slots)	Tour of MDO european related projects: MADELEINE/NEXTAIR , AGILE4.0, CS2 U-HARWARD, IMOTHEP	M. Carini/M. Méheut (ONERA, MADELEINE/NEXTAIR) J. Bussemaker (DLR, AGILE4.0) S. Ricci (PoliMi, U-HARWARD) S. Defoort (ONERA, IMOTHEP)
15h00	Technical session 3 (4 slots)	MDO in applications, focus on specific representative test cases (green aviation)	P.-J. Proesmas (TUD, Multidisciplinary Aircraft Design Optimization with Novel Climate Functions) M. Méheut (ONERA, Overview of MDO applications) M. Abu-Zurayk (DLR, Overview of MDO applications) A. Gazaix (IRT, Overview of MDO applications)
16h20	Coffee		

16h50	Technical session 4 (3 slots)	MDO frameworks and formulations	Y. David (IRT, Bi-level architectures, elements of convergence proof) A. Stück (DLR, Scalable MDAO Framework Infrastructure for FlowSimulator) F. Daoud (Airbus DS, MDO Use Cases – the Driving Force of (Industrial) Research and Technology)
17h50	Technical session 5 (2 slots)	End-to-end MDO (MBSE)	Ton van der Laan (GKN - Aerospace, Bringing Manufacturing into the MDO domain using MBSE) P. D. Ciampa (Airbus DS, Towards a model-based End2End Engineering Development)
18h30 - 19h00	Poster session / young researchers		
19h00	Banquet		
21h00	End of the social event		

DAY 2		Technical Topics	Speakers
8h30	Welcome + Coffee		
8h50	Key Note 2 (40 min.)		S. Shahpar (Rolls Royce, Role of MDO @RR)
9h30	Technical session 6 (3 slots)	(MD)O under uncertainty	S. Dubreuil (ONERA, Bayesian Formulations for MDO Applications) T. Ghisu (UniCA, Application of uncertainty quantification to turbomachinery design) P. Congedo (INRIA, Non-Parametric Measure Approximations for Constrained Multi-Objective Optimization under Uncertainty)
10h30	Coffee		
11h00	Technical session 7 (3 slots)	Topology related MDO	G. Allaire (X-Polytechnique, Multiphysics topology optimization and heat exchangers) C. Andreasen (DTU, Coupled shape and topology optimization for aeroelastic design) H. Telib (Optimad, The desperate need for MDO to unchain additive manufacturing: an invitation)

12h00	Lunch + posters		
13h30	Technical session 8 (3 slots)	Data-driven, AI-enabled (MD)O	<p>P. Seshadri (ICL, Bridging the gap between simulations & real-world data)</p> <p>P. Toint (Univ. Namur, First and second order optimization methods without function evaluation)</p> <p>B. Zhou (Univ. Bristol, Towards Data-Driven Multi-Fidelity Propeller Noise Prediction and Minimization)</p>
14h30	Technical session 9 (3 slots)	Multi-Level/Multi-Fidelity/Multi-Objective MDO	<p>T. Verstraete (VKI, "The importance of gradient accuracy in aerodynamic shape optimization")</p> <p>N. Fabiane (ONERA, Surrogate-based RBDO for Aeroelastic Applications)</p> <p>R. Olivanti (Airbus, Multi-fidelity aeroelastic optimization)</p>
15h30	Coffee		
16h00	Panel discussions	<p>Discussions about future roadmaps to go towards climate-neutral aircraft configuration (Open)</p> <p>What are the priorities and why (based on the national and international roadmaps)</p>	<p>V. Selmin, Clean Aviation JU,</p> <p>F. Blanc, AIRBUS,</p> <p>G. Rogé, DASSAULT AVIATION,</p> <p>S. Shapar, Rolls Royce,</p> <p>P. Beaumier, ONERA,</p> <p>M. Fischer, DLR,</p> <p>C. Rey, SAFRAN</p> <p>D. Descheemaeker, IRT</p>
17h00	Conclusions		
17h30	End		