ATLAS

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How will the next generation of aircraft become lighter, smarter, and more sustainable?

Who is shaping the future of advanced composite aerostructures, and what breakthroughs are needed to bring tomorrow's aviation technologies from the laboratory to the runway?

Wings of Change: Navigating the Future of Sustainable Aerostructures

Wings of Change is the flagship event of the ***ATLAS Cluster***, bringing together five Horizon Europe projects to showcase the innovations driving the transformation of aerospace composites. Spanning the entire value chain, from novel recyclable materials and automated manufacturing to digital twins, artificial intelligence, virtual certification, and next-generation aircraft concepts, the workshop offers participants a unique opportunity to explore how these complementary initiatives are collectively redefining the future of aviation.

Designed for a broad community of stakeholders, the event aims to foster cross-project collaboration, encourage knowledge exchange, and strengthen connections between research and industry.

COMPSTLAR PAIRAMID TOSCA PLEIADES HyperMorpH

ATLAS
Advanced Technologies for Lightweight Aerostructures and Sustainability

Location / platform: Aragon Institute of Technology (ITA) / MS Teams
C. María de Luna 7, 50018, Zaragoza, Spain

AGENDA

ATLAS Cluster Workshop

09:00 - 09:30	*Networking at the Gate*
09:30 - 10:00	*Take Off: Setting the Course for Sustainable Aerostructures*
10:00 - 11:00	*Session 1: Cruising Towards Circularity: Future of Composite Materials*
11:00 - 11:15	*Pit-stop Refuel (coffee break)*
11:15 - 12:15	*Session 2: Autopilot Assembly: Are Automated Manufacturing Processes Ready for Takeoff?*

WORKSHOP TICKET

12:15 - 13:30	*In-Flight Meal Service (lunch break)*
13:30 - 14:30	*Session 3: Navigating the Digital Sky: How Are Digital Twins and AI Shaping Aerospace Certification?*
14:30 - 14:45	*Refreshment Stop (coffee break)*
14:45 - 15:45	*Session 4: Landing Innovations: Scaling Impact Across Europe*
15:45 - 17:00	*Connecting Flight: Networking Session*

WORKSHOP TICKET

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09:00 – 09:30	**Networking at the Gate**		
09:30 – 10:00	**Take Off: Setting the Course for Sustainable Aerostructures**		
Time	**Title**	**Presenter**	**Project**
09:30 – 09:45	**The ATLAS Cluster's Shared Vision for the Future of Composite Aerostructures**	Anna Brékine, Project Manager, IoT Lab (Switzerland)	CompSTLar
09:45 – 10:00	**From Innovation to Industrial Impact: Priorities, Challenges and Pathways for the Future of Aerospace Structures**	Inés Villa Martínez, AERA Cluster Manager (Spain)	**KEYNOTE SPEAKER**
10:00 – 11:00	**Session 1: Cruising Towards Circularity: Future of Composite Materials**		
Time	**Title**	**Presenter**	**Project**
10:00 – 10:10	**Rethinking Composite Matrices: Can Covalent Adaptable Networks Deliver Performance and Circularity?**	Nerea Markaide, Polymers & Composites Unit, CIDETEC (Spain)	TOSCA
10:10 – 10:20	**Can Conductive Bio-based Composites Achieve Both Performance and Sustainability?**	Belén Redondo, Researcher, Gaiker (Spain)	pAIramid
10:20 – 10:30	**How Many Lives Can a Composite Have? Exploring Multicycle Recycling of Vitrimers**	Rafał Kozera, R&D Senior Specialist, NOMA Resins (Poland)	TOSCA
10:30 – 10:40	**Closing the Loop: Creating New Value from Composite Laminates through Circular Recovery**	Marc Wilms, Research Associate, Fraunhofer IPT (Germany)	CompSTLar
10:40 – 10:50	**From Waste to Wings: Can Enzymatic Recycling Unlock Truly Circular Composite Materials?**	Berta Gonzalvo, Research Director at AITIIP Technology Centre (Spain)	**KEYNOTE SPEAKER**
10:50 – 11:00	**Q&A and Panel discussion**		
11:00 – 11:15	**Pit-stop Refuel (coffee break)**		

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11:15 – 12:15	Session 2: Autopilot Assembly: Are Automated Manufacturing Processes Ready for Takeoff?		
Time	**Title**	**Presenter**	**Project**
11:15 – 11:25	**Building the Future: The Evolution of Composite Part Manufacturing in Aerospace**	Mª Dolores Vázquez Navarro, Manufacturing Technology Specialist, Boeing Aerospace Spain S.L. (Spain)	**KEYNOTE SPEAKER**
11:25 – 11:35	**Tailored by Design: How Can Automated Fibre Placement Unlock the Next Generation of Composite Parts?**	Pablo Romero Rodríguez, R&D Team Leader - Advanced Manufacturing of Composites, AIMEN Technology Centre (Spain)	CompSTLar
11:35 – 11:45	**Seeing Every Defect: Can Machine Vision Deliver Quality Assurance Throughout Composite Manufacturing?**	Christian Eitzinger, Head of Machine Vision Dept., Profactor GmbH (Austria)	TOSCA
11:45 – 11:55	**Lighting the Way: How Can Photonic Technologies Enable Smarter Composite Manufacturing?**	Harry Zervos, Senior Researcher, ICCS-NTUA (Greece)	PLEIADES
11:55 – 12:05	**3D Printing to New Heights: Can Continuous Carbon Fibre Additive Manufacturing Meet Aerospace Demands?**	Daniel Gomes, Researcher, INEGI (Portugal)	pAIramid
12:05 – 12:15	**Q&A and Panel discussion**		
12:15 – 13:30	**In-Flight Meal Service (lunch break)**		

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13:30 – 14:30	Session 3: Navigating the Digital Sky: How Are Digital Twins and AI Shaping Aerospace Certification?		
Time	**Title**	**Presenter**	**Project**
13:30 – 13:40	**From Data to Decisions: How Can Digital Twins and Physics-Informed Artificial Intelligence Improve Composite Structures?**	Carlos González, Researcher, IMDEA Materials Institute (Spain)	CompSTLar
13:40 – 13:50	**Breaking Data Silos: How Can a Digital Thread Connect the Composite Value Chain?**	Sabrina Verardi, R&I Project Manager, Engineering Ingegneria Informatica (Italy)	CompSTLar
13:50 – 14:00	**Predict Before You Repair: How Can physics and Data-Driven Maintenance Extend the Life of Composite Structures?**	Andrea Calvo-Echenique, R&D Engineer, ITA – Aragon Institute of Technology (Spain)	TOSCA
14:00 – 14:10	**From Virtual Testing to Real-World Decisions: Can Multiscale Reliability Models Accelerate Certification?**	Julen Manterola, Research Engineer, IKERLAN (Spain)	pAIramid
14:10 – 14:30	**Q&A and Panel discussion**		
14:30 – 14:45	**Refreshment Stop (coffee break)**		

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14:45 – 15:45	Session 4: Landing Innovations: Scaling Impact Across Europe		
Time	**Title**	**Presenter**	**Project**
14:45 – 14:55	**Challenges for next-gen aeronautical composites**	Tamara Blanco Varela, Expert in Multifunctional Composites, AIRBUS Operations, S.L. (Spain)	**KEYNOTE SPEAKER**
14:55 – 15:25	**Where to Next? Charting the Roadmap for Future Aerospace Innovations**	Cinzia Rubattino, R&I Project Manager, Engineering Ingegneria Informatica (Italy) Cláudio Santos, Coordinator of Technology & Innovation Management, INEGI (Portugal)	CompSTLar HyperMorpH
15:25 – 15:45	**Final Approach: Panel Discussion – Integrating Innovations for Europe's Future Aircraft**	Stania Druskova and Simona Baldovska, Project Managers, PEDAL Consulting (Slovakia)	HyperMorpH
15:45 – 17:00	**Connecting Flight: Networking Session**		

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