

ESA Workshop on Compliant Mechanisms 2025

Programme

April 2, 2025 - Newton Room	
9:15	Opening, Dorota Budzyn and Paolo Zaltron, ESA
9:25	Advancing Rollable Tubular Booms: Astronika's Product Development and Engineering Challenges Overview, Marta Tokarz, Astronika
9:50	Multi-Hinge Deployment Mechanism, Michael Bemetz, STI
10:15	Compliant Mechanisms developments at CEDRAT, François Barillot, CEDRAT
10:40	High-performance Semi-Active Micro-Vibration Isolation System, Kit Willett, ESA
11:05	BREAK
11:20	Compliant Mechanisms in AM: A retrospective of past projects - Advantages, limitations, lessons learned and associated next steps, Lionel Kiener, CSEM
11:45	Cost and planning comparison between traditional and additive manufacturing, Lionel Kiener, CSEM
12:10	New Compliant Mechanisms design methodology, Lang Guilain, CSEM
12:35	Smart actuation: overview of EAP performances from DESCARTES project, Valerio Guiliani, Almatech
13:00	LUNCH BREAK
14:00	Static balancing of compliant mechanisms - part 1, Just Herder, TU Delft
14:25	Static balancing of compliant mechanisms - part 2, Just Herder, TU Delft
14:50	Integration of buckled beams in flexure mechanisms for stiffness tuning, Loïc Tissot-Daguette, EPFL
15:15	Harnessing the Higher Order Parasitic Motions of Flexures for the Design of High-Precision High-Load Large-Stroke Mechanisms, Célestin Vallat, EPFL
15:40	BREAK
15:55	Groups discussion preparation, Dorota Budzyn and Paolo Zaltron, ESA
16:05	Groups discussion round 1
16:35	BREAK
16:50	Groups discussion round 2
17:20	BREAK
17:35	Discussion Summary and Conclusion, Dorota Budzyn and Paolo Zaltron, ESA
17:55	End of workshop