

Workshop on Gear technology, March 25, 2026 - Newton Room

Time	Title	Presenter	Company / institution
9:00	Opening and introduction of the workshop	Adam Tvaruzka	ESA
9:15	Gears = Hard! A Lesson Learnt	Matthew Holland	ESTL
9:35	Lubgear project experience, from aviation to space	Hanns Amri, Lorenz Braumann	ADT Engineering
10:00	Break		
10:20	Gears metallic materials, applicable standards, typical problems, the do's and don'ts from ESA perspective	Adrian Graham	ESA
10:50	Optimized Harmonic Drive Gears for Space Applications - New Products and Technical Progress	Sebastian Sonntag	Harmonic Drive SE
11:10	ESTL's Support for Gear System Development – <i>Current</i>	Achilleas Vortselas	ESTL
11:45	Break		
12:15	ESTL's Support for Gear System Development – <i>Future</i>	Simon Lewis	ESTL
12:35	Gearbox design capabilities - from concept to space	Holger Cermak	KISSsoft
13:00	Lunch break		
14:00	Deterministic Signal Extraction in Rotating Machinery: An Order-Based Approach to Gear Mesh Quality	Alessandro Daga	Politecnico di Torino
14:20	Gear design from manufacturer's perspective	Carl Christoph, Marcel Hautle	Sauter Bachmann
14:40	Overview of Bodycote nitriding process capabilities, focus on Nivox LH process	Sylvain Testaniere	BODYCOTE
15:05	Break		
15:30	COMOTI Gear technology experience, initial design considerations for Hybrid electric gear turbopump for reusable rockets	Razvan Nicoara	COMOTI
15:55	Testing of 3D printed polymer gears for vacuum applications	Jakub Košťál	Brno University of Technology
16:20	Gears hardening - lessons learnt	Alain Blanc	ESA
16:35	Break		
17:00	Moderated discussions	All participants	
17:40	Conclusions of the workshop	Adam Tvaruzka	ESA