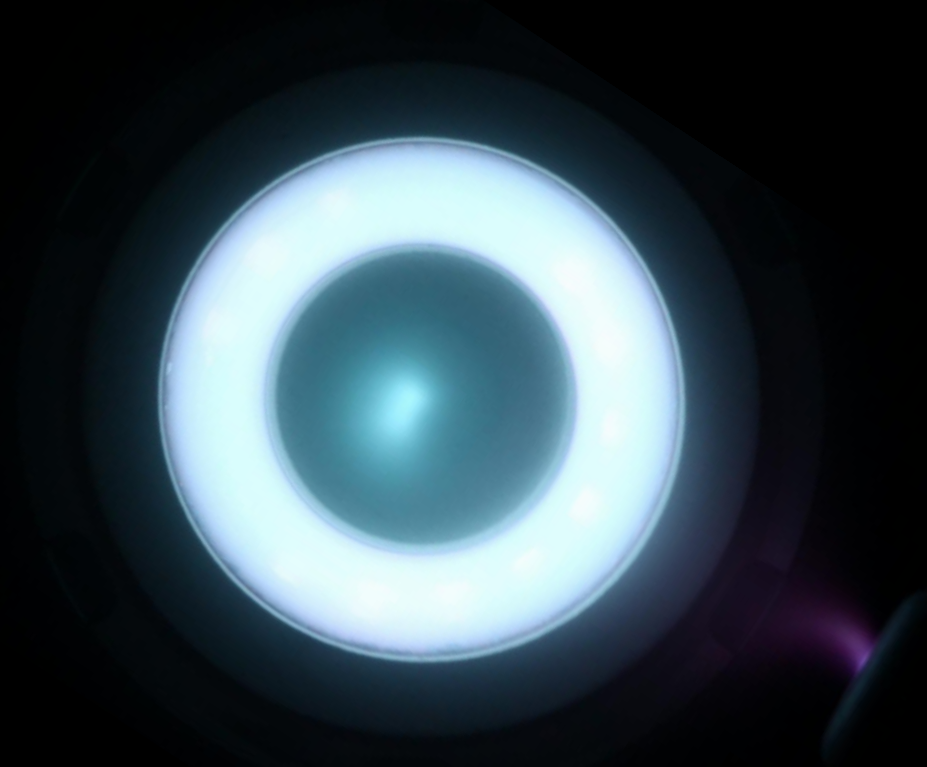


Electric Propulsion Roadmaps: Key Issues and Perspectives



Tommaso Misuri, Head of Propulsion

SITAEEL
AN **ANGEL** COMPANY

Electric Propulsion Roadmaps: Key Issues and Perspectives



Industrialization

Key Issues:

- Manufacturing processes
- Assembly/Integration processes
- Rapid Acceptance Tests
- Life Tests
- EP as a System

Perspectives:

- Low Power EP:
 - PLATiNO, MAIA, IRIDE
- 5 kW-class EP:
 - GEO, NAV and OOS
- Space Factory 4.0

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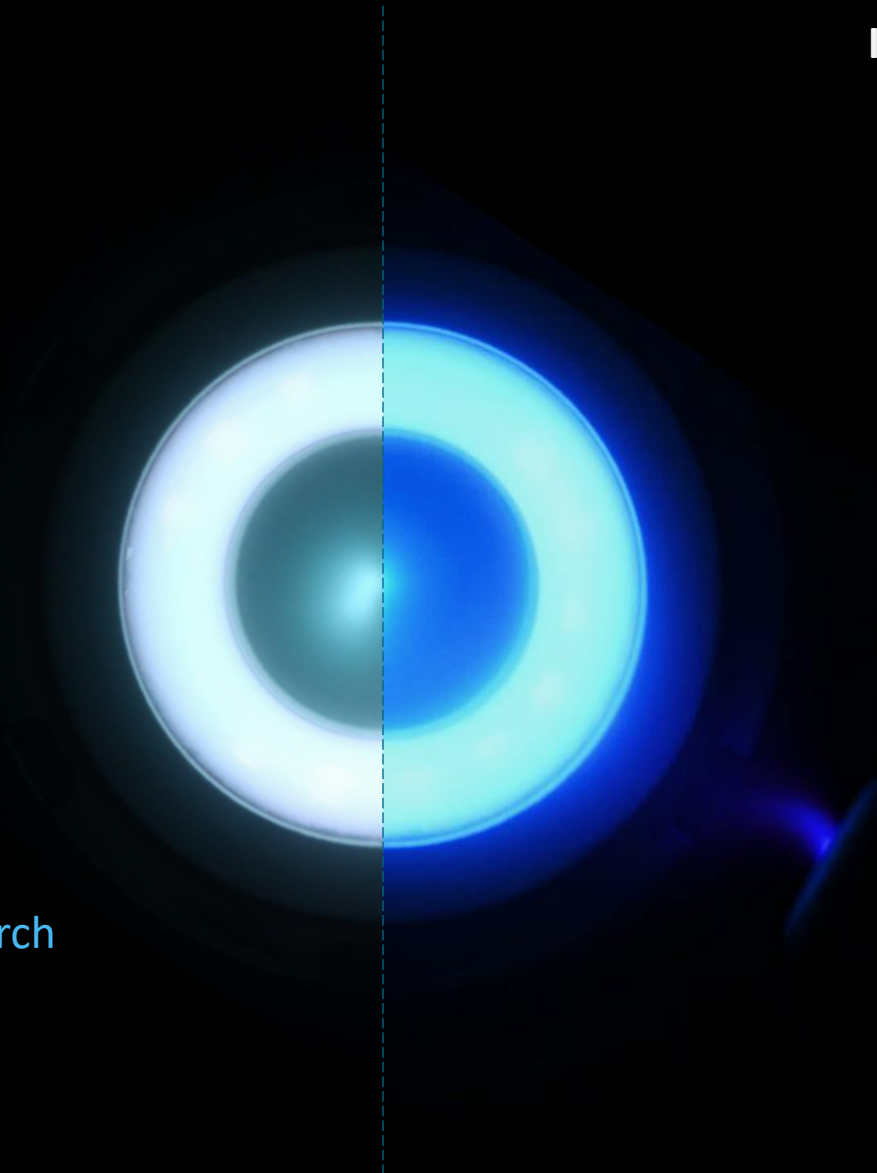
Edge Keeping/Pushing

Key Issues:

- Alternative Propellants
- Advanced materials
- Plasma Simulations
- High Current Density Hall Thrusters
- GaN Technologies (electronics)

Perspectives:

- Internal Hall Thruster Developments
- RED (Air Breathing Propulsion Platform)
- ASPIRE (20 kW-class EP System)
- Cooperation with Universities and Research Centers



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Non-Dependency



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From traditional xenon thrusters to fully European, high performance Electric Propulsion Systems that can be manufactured at scale