

About Us

ASPIRE is an EU Horizon 2020 project that aims at developing a Space High Power Electric Propulsion System of **more than 20kW**.

www.aspire-h2020.eu/

#ELECTRIC
PROPULSION
FOR SPACE

News

Final Dissemination Event

17th April 2024, Pisa (Italy)
3-7 pm CEST, Hybrid Format

Mark your calendars for the grand finale of the ASPIRE project, in Pisa, Italy. The event will showcase all the groundbreaking results achieved throughout the project's lifespan. For detailed information on agenda and hybrid format participation, please visit our website [here](#).

Get In Touch



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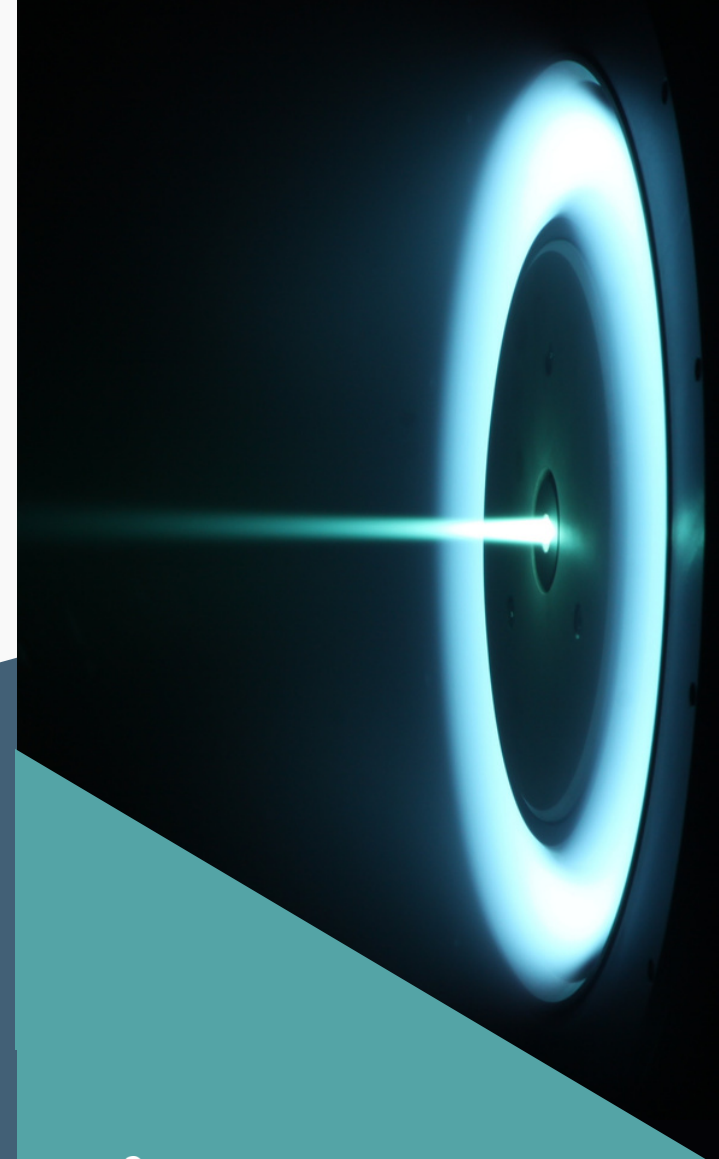
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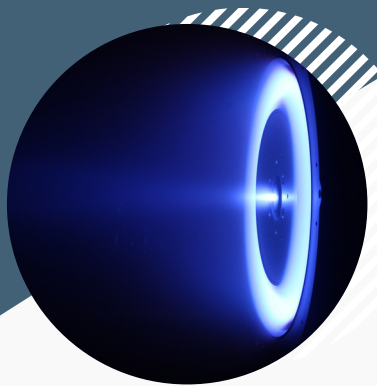


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Highlight

Next generation of plasma propulsion technologies

Our developed high-fidelity and versatile kinetic numerical tool and the advanced ML/DD architectures serve to underpin the future of developments in the EP arena beyond ASPIRE.

These developments will be characterized by cost-efficient, high-reliability processes based upon a trustworthy co-working platform of simulation tools and diagnostics, and will hence unlock the next generations of plasma propulsion technologies to realize the humankind's space exploration aspirations.

Our Activities



The ASPIRE project is focused on solidifying the requirements and design of the Electric Propulsion System (EPS), enhancing the design, and understanding the behavior of EPS in combined configurations.



It is also developing analytical and simulation tools for predicting long-term system performance.



The project works on characterizing an Electric Propulsion System (EPS) under various background pressures and with alternative propellants.

And finally, ASPIRE is dedicated to establishing a clear roadmap for the In Orbit Validation of the EPS.

Highlight

A first-of-its kind document. ASPIRE's Simulation-aided Qualification Strategy

During the ASPIRE project Imperial College London (ICL) has been championing the concept of "computer-aided" qualification for Hall thrusters and Electric Propulsion (EP).

This concept serves to drastically **cut the cost and time of development and qualification of novel EP technologies**, ultimately obviating a long-standing barrier on the path of upscaling and transformation of EP in light of the emerging space applications and their associated requirements.

