

SPACE PROPULSION SYMPOSIUM (C4)
Electric Propulsion (4)

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RECENT DEVELOPMENTS IN HIGH POWER ELECTRIC PROPULSION: OUTCOMES OF HIPER
PROJECT ACTIVITIES**Abstract**

High Power Electric Propulsion could play a key role in space exploration venture by enabling more affordable and sustainable space-to-space missions (such as missions targeting L2 libration point, Near Earth Objects or even interplanetary travels). Nevertheless, the ability to fully realize the benefits deriving from the application of advanced electric propulsion is also dependent on the development of suitable electrical power sources. HiPER is a 3-year collaborative project funded by the European Union and under the coordination of Alta aimed at laying the technical and programmatic foundations for the development of innovative Electric Propulsion technologies - and of the related power generation - to fulfill future space transportation and space exploration needs. The paper presents the proposed scenarios for High Power Electric Propulsion applications and the development status of the innovative technologies for future space exploration addressed in the programme.