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IEPC¹⁹ Programme

	Material Technology Cathodes, Gimbals	Field Emission / Colloid Thrusters	Hall Thrusters 1	Hall Thrusters 2
	HS6	SR5	SR6	SR2
	1 st Chair S. Gabriel 2 nd Chair L. Garrigues	1 st Chair P. Lozano 2 nd Chair V. Hugonnaud	1 st Chair I. G. Mikellides 2 nd Chair S. Zurbach	1 st Chair A. Dominquez 2 nd Chair C. Drobny
00:60	A782 Recent Advances in Low-Current Hollow Cathodes at SITAEL D. Pedrini	A139 Dual-Axis Torsional Thrust Stand for Simultaneous Direct Measurement of Thrust and Mass Loss <i>M. Gilpin</i>	A906 Qualification Status of the PPS® 5000 Hall Thruster Unit O.Duchemin	A156 Convergence of Stochastic Models for Electric Propulsion Plume Simulation S. Araki
09.15	A207 Tests of an iodine-fed rf-neu- tralizer P. Dietz	A445 Development of a Retarding Potential Analyser for Low Density FEEP Thruster Beam Diagnostics N. S. Mühlich	A673 Qualification status of the EP system for Heinrich Hertz satellite (H2Sat) S. Ciaralli	A222 Long-term Scale Characteristics of Low-frequency Oscillation of Hall Thrusters L. Wei
09.30	A896 Ariane Group 5A Neutralizer qualification status <i>M. Berger</i>	A566 Two-dimensional plasma plume density characterisation of the IFM Nano Thruster S. Keerl	A599 Development and Performance Test of a 50 W-class Hall thruster D.Lee	A235 Study of Xenon Wall Accommoda- tion Model and Background Flow During Hall Thruster Ground Test G. Ito
09.45	A297 Performance Testing of a Microwave ECR Neutralizer for the X-EPT Gridded Ion Thruster for Telecoms Applications S. Reeve	A260 MEMS FEEP Thrusters – Minia- turised Liquid Metal Ion Source using Glass Capillaries <i>M. Tajmar</i>	A634 Development and Characteri- zation of a Miniature Hall-Effect Thruster using Permanent Magnets N. Gondol	A263 Numerical Investigations of Background Pressure Effects and Channel Erosion in the SPT-140 Hall Thruster for the Psyche Mission A. Lopez Ortega
10.00	A172 LaB6 hollow cathode work function enhancement: insight into the chemical processes <i>P. Guerrero</i>	A362 Development, Production, and Testing of the IFM Nano FEEP Thruster T. Schönherr	A375 Miniaturized Cylindrical Hall Thrusters J. Simmonds	A247 Numerical Simulations of AFRL EP/TEMPEST experiment using the Thermophysics Unified Research Framework (TURF) <i>L. Brieda</i>
10.15	A245 Plasma model and experimental investigation of a hollow cathode neutraliser A. Gurciullo	A675 The IFM Micro FEEP thruster: a modular design for smallsat propulsion L. Grimaud	A465 Investigation of the possibility to develop competitive small power stationary plasma thruster (SPT) <i>V. Kim</i>	A237 Study on Feed System of Iodine Cusped Field Thruster H. Liu
10.30	A301 Hollow cathode thermal model- ling and self-consistent plasma solution: two step neutralization modelling <i>P. Guerrero</i>	A686 The ESA Earth Observation Pro- gramme activities for the design, development and qualification of the mN-FEEP thruster L. Massotti	A836 Overview of NASA's Solar Electric Propulsion Project P. Peterson	A285 Influence of additional electric field on discharge performance of Hall thruster under internal and external cathode position studied by particle-in-cell simulation XF. Cao

Ion Thrusters	Resistojets/ Arcjets	Innovative Concepts
HS5	SR4	HS3
1 st Chair H. Leiter 2 nd Chair M. Mallon	1 st Chair P. P. Upadhyay 2 nd Chair -	1 st Chair P. Turchi 2 nd Chair D. Packan
A356 T7 thruster design and performance J. Perez Luna	A224 Electrostatic Probe Investigation of Very Low Power Arcjet VELARC in IRS and ESA-ESTEC Facilities J. Skalden	A158 Optimum design for the drive-coil of a 500J inductive pulsed plasma thruster and its numerica evaluation <i>B. Che</i>
A688 T5 Performance, Indus- trialisation and Future Applications K. Hall	A122 An Efficient Ionization Method for Pressure Up To Thousands of Pascals L. Chang	A191 Effects of Collisional-Ra- diative Processes with Relative Drift in Electric Propulsion Devices <i>R. J. Abrantes</i>
A360 Testing of a 50,000-s, Lithium-fueled, Gridded Ion Thruster J. Brophy	A170 The Development and Qualification of the STAR Resistojet System for Telecommunications Applications <i>F. Romei</i>	A259 Water as an Alternative Propellant for a Next Generation Plasma Propulsion System A. Schwertheim
A811 Development and testing of the NPT30 ion iodine thruster J. Martínez	A786 A 17.8-GHz Ammonia Microwave Electrothermal Thruster for CubeSats and Small Satellites <i>M. Micci</i>	A330 Numerical Simulations of the Plasma Discharge in an Helicon Plasma Thruster J. Zhou
A383 Development of 50 W class RF gridded ion thruster <i>T. Nguyen</i>	A393 Lifetime Investigations of an Additively Manufac- tured High-temperature Resistojet Heat Exchang- er from Tantalum <i>M. Robinson</i>	A560 Research on Micro Impulse Measurement Technology for Micro Cathode Arc Thruster X. Liu
A446 Development Status of Microwave-ion Thruster M5 for Small and Micro Satellites <i>K. Zhu</i>	A403 Structural effects on the high temperature performance of the Super High Temperature Additive Manufactured Resistojet (STAR) C. Ogunlesi	A633 PIC/fluid/wave simu- lations of the plasma discharge in an ECR plasma thruster A. Sánchez-Villar
A652 Discharge-Mode Testing of the X-EPT Microwave ECR Gridded Ion Thruster for Telecoms Applications D. Hoffman	A631 Effect of structure characteristics on start-up process of an Arcjet thruster Y. Shen	×

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Power Processing Developments

SR3

1st Chair R. Velasco Valencia 1st Chair T. Yamamura 2nd Chair D. Pavarin

A474

Development of a full bridge series resonant radio-frequency Plasma Thruster its numerical generator for optimized **RIT** operation J.E.Junker

A512

A567

High Voltage Power Supply for T5 Gridded Ion Thruster M. Blaser

and medium power Hall

Effect Thruster

S. Neugodnikov

A575 Development of High Efficiency Power Processing Unit for Hall Thruster

A. Tsybulnyk

A584

Power Processing Unit Activities at Thales Alenia Space in Belgium E. Bourguignon

A729 Rafael's Power Process-Propulsion Systems D.Lev

A888

AIRBUS DS PPU qualification status for HET, GIT and New Space Technologies F. Pintó Marín

Thruster Concepts

HS2

2nd Chair J. Little

A415

Numerical Model of a Magnetically Enhanced M. Magarotto

A460

3D simulations of a magnetized Hall Effect thruster plume F. Cichocki

A564

Design and Manufactur-ing of Control Unit for Iow and Ablation Model for a Vacuum Arc Thruster S. Bai

A573

Numerical Analysis of Plasma Acceleration Driven by Loop Coil in Electrodeless Thruster Y. Yamakawa

A818

Effect of the initial electron distribution function in magnetic nozzle expansions S. Correyero Plaza

A744

A 3D Numerical Study of ing Unit (PPU) for Electric Arcjet Thrusters: Effect of Electrode Configuration on Performance of Arcjet thruster H. Nandyala

A609

Discrete Boltzmann Modeling of Atmospheric Pressure Plasma Jet J. Song