Material Technology Cathodes, Gimbals

HS6

1st Chair S. Mazouffre
2nd Chair S. Thompson

09:00

A628
Experimental characterization of the attachment length in orificed hollow cathodes
P.-Y. Taunay

09.15

A663
Two-Photon Absorption Laser Induce Fluorescence (TALIF) of Neutral Xenon Density in a Barium Oxide Hollow Cathode Plume
T. Wegner

09.30

A689
Fiber Coupled Cavity Enhanced Thomson Scattering Diagnostic for Use in Electric Propulsion Facilities
A. Friss

09.45

A760
5-100 A LaB6 Hollow Cathodes for High-Power Hall Thrusters
G. Becatti

10.00

A427
Mode Transition in a LaB6 Hollow Cathode for Electric Propulsion Systems for Small Satellites
G.-C. Potrivitu

10.15

A428
Systematic Testing of Improved Designs of Miniaturized LaB6 Hollow Cathodes for Electric Propulsion Systems for CubeSats and Small Satellites
G.-C. Potrivitu

10.30

A369
Lithium Hollow Cathode for a Very High Isp Interstellar Precursor Ion Thruster
D. Goebel

10.45

A371
High Current Hollow Cathode for the X3 100-kW Class Nested Hall Thruster
G. Becatti

11.00 Conference Tour

Field Emission / Colloid Thrusters

SR5

1st Chair D. Courtney
2nd Chair B. Seifert

A213
Quantitative mapping of the mechanisms affecting electrospray thruster lifetime
A. Collins

A368
Resolving electrospray emission modes using high-speed current measurements
N. Uchizono

A571
Spatially-Resolved Electrospray Plume Current and Mass Flux Measurements and Analysis
A. Thuppul

A892
Characterization of Electrospray Thruster Electrode Overspray and Backspray
C. Marrese-Reading

A909
Microfluidic and materials improvements in the ion Electrospray Propulsion System
J. MacArthur

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Hall Thrusters 1

SR6

1st Chair T. Matlock
2nd Chair H. Watanabe

A140
Development of a 1.5KW High Specific Impulse Magnetic Shielded Hall Thruster
A. Mishra

A274
High Throughput 1.5 kW Hall Thruster for Satcoms
S. Zurbach

A901
Development of the High Voltage Hall Accelerator Propulsion System
H. Kamhawi

A651
The Application of an Advanced Electric Propulsion System on the NASA Power and Propulsion Element (PPE)
D. Herman

A282
Overview of the Ascendant Sub-kW Transcelestial Electric Propulsion System (ASTRAEUS)
R. Conversano

A283
Development Acceptance Testing of the Thruster Component of the Ascendant Sub-kW Transcelestial Electric Propulsion System (ASTRAEUS)
R. Conversano

A873
Development of a low power HEMP Thruster EVO
R. Heidemann

A878
HT5k Thruster Unit Development History, Status and Way Forward
T. Andreussi

Hall Thrusters 2

SR2

1st Chair R. Hofer
2nd Chair K. Komurasaki

A879
SITAEL's Magnetically Shielded 20 kW Hall Thruster Tests
T. Andreussi

A591
Preliminary tests of HIKHET laboratory model at IPPLM
M. Jakubczak

A343
Effects of Thrust Noise on Drag-Free and Attitude Control System
K. Cui

A377
Mini-CHT powered Formation Flying Mission for Magnetic Reconnection Research in Space
J. Simmonds

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Ion Thrusters

HS5

1st Chair E. Bosch
2nd Chair D. Feli

A678
Global model of a magnetized ion thruster with xenon and iodine
R. Lucken

A831
Investigation on Alternative Propellants for Gridded Ion Engines
N. Fazio

A862
Integrated Vlasov-Fully Kinetic PIC Simulations of Plasma Plumes
C. Cui

A882
Influence of Hollow Cathode design parameters on Ring Cusp Discharge Chamber performances
F. Cannat

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Pulsed Plasma Thrusters

SR4

1st Chair T. Schönherr
2nd Chair M. Glascock

A497
Investigation on the Discharge Arc Behaviour of an Asymmetric Electrodes Pulsed Plasma Thruster
Z. Zhang

A108
Analysis of Distributed Energy Release Characteristics in an Ablative Pulsed Plasma Thruster
L. Yang

A476
PETRUS 2.0 PPT and its CubeSat-size PPU: Testing and Characterization
C. Montag

A931
Development of an Electrostrictive Force Feeding Subsystem for Liquid Pulsed Plasma Thruster
C. Dobranszki

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Innovative Concepts

HS3

1st Chair J. Cassady
2nd Chair J. Woods

A361
Directed-Energy Propulsion Architecture for Deep-Space Missions with Characteristic Velocities of Order 100 km/s
J. Brophy

A458
Hybrid Electric Propulsion System on the Basis of SPT and PPT
M. Kazeev

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Power Processing Developments

SR3

1st Chair D. Lev
2nd Chair C. Roessler

A187
Study of Operation of Power and Propulsion System based on Closed Brayton Cycle Power Conversion Unit and Electric Propulsion
A. V. Karevsky

A270
Electric Propulsion Mission Design with Minimal Solar Cells Radiation Degradation
A. Starchenko

A190
High Efficiency Auto Resonant Converter Anode Power Supply Design, Development Testing
M. Richards

A346
Designing, Manufacturing and Testing of Power Processing and Control Unit for a 1.5 kW Hall Effect Thruster
S. Neugodnikov

A280
Deep Space Power Processing Unit for the Psyche Mission
G. Lenguito

A409
Design and Implementation of a High Voltage Supply for Gridded Ion Thrusters using model-based control algorithms
C. Roessler

A419
REGULUS: Know-How Acquired on Iodine Propellant
M. Magarotto

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Thruster Concepts

HS2

1st Chair K. Dannenmayer
2nd Chair O. Neunzig

A242
Digital Filtering of Electric Thruster Time Domain Radiated Emissions
N. Rongione

A521
Direct thrust measurement of a vacuum arc thruster
J. Jarrige

A595
Mechanically amplified milli-Newton thrust balance for RF-thrusters
M. Wijnen

A715
Development of the SPACE Lab Thrust Stand for Millinewton Thrust Measurement
P. Thoreau

A578
Self-calibration Laser Induced Fluorescence technic in Electric Propulsion plasma diagnosing
X. Yang

A863
Laser ablation plasma diagnostics for electrostatic acceleration
A. Hamada

A623
Active Wave Injection Diagnostic for Plasma Dispersion Relation Measurements
E. Choueiri

A538
Torsional Balance Thrust Measurement Techniques for Small RF Thrusters
C. Cretel