



Sunday May 1st, 2016	
17:00	REGISTRATION
19:00	WELCOME COCKTAIL
Monday May 2nd, 2016	
08:30	REGISTRATION
09:00	WELCOME COFFEE
ROOM	
PLENARY SESSION - TIZIANO	
10:00	<p><b>CONFERENCE INTRODUCTION</b>                      Michel SCHELLER, President, Association Aéronautique et Astronautique de France (3AF)                      Johann Dietrich WÖRNER, Director General, European Space Agency (ESA)                      Giorgio SACCOCCIA &amp; Dominique RIBEREAU, Conference Chairs</p>
10:30	<p><b>HEAD OF AGENCIES ROUND TABLE ON SPACE MISSIONS: MID AND LONG TERM POLICIES</b>                      Moderator: Chiara MANFLETTI, ESA                      Johann Dietrich WÖRNER, Director General, European Space Agency (ESA)                      Pascale EHRENFREUND, Chairwoman of the Executive Board, German Space Agency (DLR)                      James FREE, Deputy Associate Administrator for Human Exploration and Operations, National Aeronautics and Space Administration (NASA)                      Roberto BATTISTON, President, Italian Space Agency (ASI)                      Jean-Marc ASTORG, Director of Launchers, French Space Agency (CNES)                      Nick COX, Head of Space Technology Strategy, UK Space Agency (UKSA)                      Ekaterina TVERDOKHLEBOVA, Head of Lab Applied Plasma Dynamics and Plasma System, Central Research Institute of Machine Building (TsNIIMASH)</p>
12:30	LUNCH
13:45	<p><b>PRIMES AND OPERATORS VS SUPPLIERS VIEWS ON SPACE PROPULSION: SPACE TRANSPORTATION</b>                      Moderator: Lucía LINARES, ESA                      Stéphane ISRAEL, CEO, Arianespace                      Hervé GILIBERT, CTO, Airbus Safran Launchers (ASL)                      Mark THOMAS, Managing Director, Reaction Engines                      Giulio RANZO, CEO, AVIO S.p.A.                      Hans J. STEININGER, CEO, MT Aerospace                      Gerhard HAGEMANN, Director of Propulsion and Equipment - Acting, Airbus Defense &amp; Space                      Ulf PALMNÄS, Vice President Business Development and Marketing, GKN Aerospace                      IHI Aerospace TBC</p>
15:30	COFFEE BREAK
16:00	<p><b>PRIMES AND OPERATORS VS SUPPLIERS VIEWS ON SPACE PROPULSION: SPACECRAFT</b>                      Moderator: Nicole VIOLA, Politecnico di Torino                      EUTELSAT TBC                      Philippe GARÇON, Head of Propulsion Department, Thales Alenia Space                      Vincent JACOD, Head of Electric Propulsion Department, Airbus Defence &amp; Space                      Markus PEUKERT, Head of Propulsion Department, OHB Systems AG                      Nicola ZACCHEO, CEO, SITAEAL                      Head Aerospace TBC                      Roger MYERS, Executive Director, Redmond Operations, Aerojet Rocketdyne                      Mathias PERSSON, President, ECAPS                      Nicolas DE CHANEAU, Electric Propulsion &amp; Business Development Deputy Manager, Snecma Safran Group                      Karl WIELAND NAUMANN, Director Business Development &amp; Strategy, Bayern-Chemie                      Eric BOURGUIGNON, PPU Product Manager, Thales Alenia Space Belgium                      Nicoletta WAGNER, Head of Power Products - Satellites, Airbus Defence &amp; Space</p>
18:00	END OF DAY 1
19:30	TRADITIONAL DINNER / Antico Casale la Carovana

SPACECRAFT	SPACE TRANSPORTATION	GENERAL INTEREST
------------	----------------------	------------------

Tuesday May 3rd, 2016

ROOM PLENARY SESSION - TIZIANO

08:30 **KEYNOTE SPEECH: SPACE PROPULSION, PAST, PRESENT AND FUTURE**  
Jean-Jacques DORDAIN, former Director General of ESA

Session 1 - EP In Space (1)	Session 2 - ST - Air Breathing Propulsion - SABRE	Session 3 - EP New Concepts (1)	Session 4 -SC - Propellant Management (1)	Session 5 - ST - LOX / CH4 Propulsion (1)	Session 6 - ST - Hybrid Propulsion (1)	Session 7 - Overview of Current Programs (1)	Session 8 - ST - Propulsion Components: Combustion Chambers
-----------------------------	---	---------------------------------	---	---	--	--	---

ROOM BRAMANTE 1 BRAMANTE 2 BRAMANTE 3 BRAMANTE 4 BRAMANTE 5 BRAMANTE 6 BRAMANTE 7 BRAMANTE 8

Chairpersons	BRAMANTE 1	BRAMANTE 2	BRAMANTE 3	BRAMANTE 4	BRAMANTE 5	BRAMANTE 6	BRAMANTE 7	BRAMANTE 8
09:00	3125056 Progress toward Flight Readiness of a 40-kW-class Solar Electric Propulsion System D. Manzella, NASA Glenn Research Center, US	AP5 The SABRE engine – A new approach to technology development for space access D. Perigo, ESA, NL	3125278 Investigation of capillary type liquid metal ion emitters C. Scharlemann, University of Applied Sciences Wiener Neustadt, AT	3124721 Thermal Propellant Gauging in OHB I. Fischer, OHB System, DE	3125115 LOX/GCH4 Heat Sink Combustion Chamber: Testing and Assessment of Experimental Data F. Battista, Italian Aerospace Research Centre, IT	3124641 Demonstration of 30kN-thrust hybrid rocket propulsion at Nammo Raufoss within ESA FLPP A. Boiron, Nammo Raufoss AS, NO	3125105 ASI-JAXA cooperation in the field of LOX-Methane propulsion for Space applications E. d'Aversa, ASI Italian Space Agency, IT	3124835 Model Assessment for Gaseous Film Cooling in a Subscale Single Element GCH4-GOX Combustion Chamber M.P. Celano, Technische Universität München (TUM), DE
09:20	3124687 Plasma Propulsion TAS in-flight Experience A. Naulin, Thales Alenia Space, FR	3125223 The SABRE Engine Concept R. Bond, Reaction Engines Ltd, UK	3124967 Studying the plume neutralization process of the PEGASES thruster F. Cichocki, Universidad "Carlos III" de Madrid, ES	3124615 The Evolutionary Forces and the Design and Development of Propellant Management Devices for Space Flight in Europe and the United States W. Tam, Orbital ATK, US	3125050 O2/CH4 Thruster Demonstrator design and testing for RCS/RACS thruster application A. Schoeller, AVIO S.p.A., IT	3124934 Optical Analysis of Hybrid Rocket Combustion with Decomposition Methods A. Petrarolo, Deutsches Zentrum für Luft- und Raumfahrt e.V. (DLR), DE	3125132 JAXA's Current Activities for the Research of a LOX/LCH4 (LNG) Engine I. Masuda, JAXA, JP	3124668 Synthesis of a niobium thrust chamber coated with MoSi2 coating X. Zhang, Aerospace Research Institute of Material and Processing Technology, CN
09:40	3124673 Ensuring Safe and Reliable Operations of the Electric Propulsion System for the BepiColombo Mission – An Overview of Planned Nominal and Contingency Commissioning Activities H. Gray, Airbus Defence and Space, UK	Intake and Bypass for the SABRE Engine J. Barth, Reaction Engines Ltd, UK	3125141 Smallsat Propulsion Module P. Smith, Moog Cheltenham, UK	3125270 Migration of Center of Gravity on a 40 Inch Diameter Tank with Stiffening Rings D. Kirk, Florida Institute of Technology, US	3124644 Cryogenic Rocket Engine Developments at Delft Aerospace Rocket Engineering J. Wink, Delft University of Technology, NL	3125289 Mission Definition and System Requirements for Highly-Functional Hybrid Rocket Demonstration T. Shimada, Japan Aerospace Exploration Agency, JP	3124609 Activities on Electric Propulsion at ESA J.A. Gonzalez del Amo, ESA, NL	3124877 Application of laser-ignition systems in liquid rocket engines S. Soller, Airbus Safran Launchers, DE
10:00	3125308 Electric propulsion as an enabling technology for a very low Earth orbit mission L. Ansalone, ASI - Agenzia Spaziale Italiana, IT	3125224 Pre-Cooler Design and Development for the SABRE Engine R. Bond, Reaction Engines Ltd, UK	3125189 Modelling of Ion Current, Cathode Heating and Thrust in Inertial Electrostatic Confinement Devices D. Petkow, Gradel sàrl, LU	3124905 Achieving High Precision Centre of Mass and Sloshing Control in Spacecraft with PMD Propellant Tanks R. Bellarosa, Airbus Defence and Space, UK	3125059 Advancements in the HYPROB-BREAD project: design and testing of a LOX/LCH4 demonstrator F. Battista, Italian Aerospace Research Centre, IT	3124672 Development and performance of the 10 kN hybrid Rocket Motor for the Stratos II Sounding Rocket R. Werner, TU Delft, NL	3124871 NASA's Development of the European Service Module Propulsion Subsystem for the Multi-Purpose Crew Vehicle through International Partnership with ESA K. Dickens, NASA, US	3124645 Laser ignition of LOX-kerosene propellant in liquid rocket engine of "Soyuz" LV N. Ivanov, NPO Energomash, RU
10:20	3124832 Comparison of Future Mission Needs with Available Electric Propulsion Technologies B. Wollenhaupt, OHB System, DE	3125226 Aerospace Compressor & Turbine Technologies for Reusable Space Vehicle Powerplants P. Davies, Reaction Engines Ltd, UK	3124954 Cubesat testing of Coulomb drag propulsion P. Janhunen, Finnish Meteorological Institute, FI	3125271 Characterization of Elastomeric Diaphragm Motion in a 12.88 inch Diameter Tank under 1-DOF Sinusoidal Excitation D. Kirk, Florida Institute of Technology, US	3124622 LOX/Methane Thrust Chamber Demonstrator Testing R. Blasi, Airbus-Safran-Launchers, FR	3125055 Hybrid Motor Demonstrator activities for lander module system A. Schoeller, AVIO S.p.A., IT	3125329 Green Propulsion activities: Update of current status and activities from ESA A. Gernoth, ESA, NL	3124927 Methane/oxygen laser ignition in an experimental rocket combustion chamber: Impact of mixing and ignition position M. Wohlhüter, DLR Lampoldshausen, DE
10:40	3125242 The integration of electric propulsion thrusters on very low earth orbit microsatellites J. Walsh, University of Bristol, UK	3125048 Testing Air-Breathing Rocket Engines J. Macfarlane, Airborne Engineering Limited, UK	3124869 NOMADS: Development of a versatile Plasma Discharge Simulation platform for Electric Propulsion D. Perez-Grande, Universidad Carlos III de Madrid, ES	3125274 Characterization of Elastomeric Diaphragm Motion within a Spacecraft Propellant Tank D. Kirk, Florida Institute of Technology, US	3124947 LOX/Methane reusable rocket propulsion at reach with large scale demonstrators tested S. Magniant, Airbus Defence & Space, FR	3124608 Re-ignition and Performance Study of N2O/HTPB Hybrid Rocket Motors L.Y. Huang, National University of Defense Technology, CN		3124764 Numerical Investigation of Creep Fatigue Damage Mechanisms in Rocket Combustion Chambers H. Amakawa, Japan Aerospace Exploration Agency, JP
11:00	COFFEE BREAK							

SPACECRAFT	SPACE TRANSPORTATION	GENERAL INTEREST
------------	----------------------	------------------

Tuesday May 3rd, 2016

	Session 9 - EP in Space (2)	Session 10 - SC HET (1)	Session 11 - SC - Electrothermal (1)	Session 12 - SC - Propellant Management (2)	Session 13 - Modelling Chemical Propulsion (1)	Session 14 - ST - SRM (1)	Session 15 - Modelling SubSystems and Systems	Session 16 - AM/3D Printing (1)
ROOM	BRAMANTE 1	BRAMANTE 2	BRAMANTE 3	BRAMANTE 4	BRAMANTE 5	BRAMANTE 6	BRAMANTE 7	BRAMANTE 8
<b>Chairpersons</b>								
<b>11:30</b>	3124713 Performance evaluation of using the IESP module installed on the spacecraft moving in an irregular gravitational field of the asteroid A. Shomikov, Samara State Aerospace University, RU	3124688 Plasma thruster of a middle power PlaS-55: development and experimental research first results M. Potapenko, EDB Fakel, RU	3125075 A Dual-Mode Propulsion System with Arcjets as an Alternative Propulsion System for the SGE0 Platform F. Gamgami, OHB System AG, DE	3124699 Electronically Controlled, Piezo-Actuated, 10,000 psi Regulator J. Ponzo, Marotta Controls, US	3124872 Diffuse interface modelling for the Large Eddy Simulation of the primary atomization in cryogenic rocket engines A. Murrone, ONERA - The French Aerospace Lab, FR	3125118 Advanced Biological Treatment for Solid Propulsion - LICORNE G. Dupouy, Herakles - Groupe Safran, FR	3125128 Performance Analysis of the ORION European Service Module Propulsion Subsystem B. Determann, Airbus DS, DE	3124940 Turbine design for Ariane 6 Vulcain turbopumps upgrades S. Brodin, GKN Aerospace, SE
<b>11:50</b>	3125243 Propulsion Requirements for Station Keeping of Small LEO Satellites M. Leomanni, Università di Siena, IT	3124789 Experimental and numerical investigations of rotating plasma structures in Hall thrusters S. Mazouffre, CNRS - ICARE, FR	3124939 Xenon-feed arcjet design investigation and experimental characterization G. Cifali, Stael S.p.A., IT	3125337 Passivation Valve for Satellites Propulsion System M. zaberchik, Rafael, IL	3125015 Numerical Rebuilding of an Experimental Test Campaign on a Supercritical Methane Cooling Channel M. Pizzarelli, University of Rome "La Sapienza", IT	3125146 Crack evolution in a frontal thermal protection: numerical analyses and experimental validation F. Paglia, AVIO S.p.A., IT	3124855 Thermodynamic Assessment of Hypersonic Aircraft Missions V. Fernandez Villace, ESA, NL	3125180 Design and evaluation test results of 3D printed cold gas thruster nozzle for small re-entry capsule G. Fujii, JAXA, JP
<b>12:10</b>	3124709 BepiColombo SEPS Coupling Test Performance Results S. Clark, QinetiQ, UK	3124904 Hall Thruster R&D Activities at Osaka Institute of Technology Y. Takahata, Osaka Institute of Technology, JP	3125277 Preliminary Assessment of an AF-M315E Arcjet G. Williams, Ohio Aerospace Institute, US	3125320 Microgravity PMD Investigations R. Putzu, Hepia, CH	3125022 Enhanced Cryogenic CFD Modelling Using Fibre-Optic Temperature Field Sensors M. Siegl, DLR, DE	3125364 Characterisation of AP/Fox7/GAP Composite Solid Rocket Propellant Formulations with Reduced HCl exhaust gas H. Lips, Qtec, DE	3125216 Silicon oil thermal barrier system for in space applications S. Hyde, European Space Agency, NL	3125209 Additive Manufacturing Capabilities for Space Propulsion Hardware M. Smith, ESA, NL
<b>12:30</b>	3124765 The Simulation of the Interplanetary Transfer of the Research Spacecraft with Low Thrust Propulsion to the Potentially Hazardous Asteroid R. Khabibullin, Samara State Aerospace University, RU	3124798 Investigation of SPT-140 thruster mechanical strength O. Boychenko, EDB Fakel, RU	3124935 AISAT-1B Butane Propulsion System Performance D. Darfilal, Satellite Development Center (CDS), DZ	3124910 Shock Vector Control for Reaction Control System Thrusters C. Bright, UNSW Canberra, AU	3125150 Towards a reliable LES-CMC coupling strategy for compressible CFD simulations of LRE thrust chambers P.P. Ciottoli, Sapienza University, IT	3124976 Bistability behavior in solid rocket motor W. Ao, Northwestern Polytechnical University, CN	3125358 EUCLID MPS advanced verification G. Noci, Finmeccanica, IT	3124941 3D-Printing of High Temperature Materials for Next Generation Thrusters and Apogee Engines L. Wermuth, Airbus DS GmbH, DE
<b>12:50</b>	<b>LUNCH</b>							

Tuesday May 3rd, 2016

ROOM

PLENARY SESSION - TIZIANO

14:20

**PLENARY ROUND TABLE: PROPULSION FOR MICRO AND NANO SATELLITES**

**Moderator: Sabrina CORPINO**, Politecnico di Torino  
**Fabio CAMELLI**, ESA/ESRIN  
**Marco VILLA**, President and COO, Tyvak  
**Jean HUI**, Head Aerospace  
**Nicola ZACCHEO**, CEO, SITAEL  
**Jean MUJLAERT**, Director, von Karman Institute for Fluid Dynamics  
**Michele COLETTI**, Director, Mars Space Ltd  
**Vlad HRUBY**, President, Busek  
**Vytenis BUZAS**, CEO, Nanoavionics  
**Chen YEN-SEN**, National Applied Research Laboratories, Taiwan

15:50

COFFEE BREAK

Session 17 - SC - GIEs (1)

Session 18 - SC - HET (2)

Session 19 - SC - Electrothermal (2)

Session 20 - SC - Green Propulsion for Spacecraft (1)

Session 21 - Pressure-Thrust Oscillation Issues (1)

Session 22 - ST - Hybrid Propulsion (2)

Session 23 - Overview of Current Programs (2)

Session 24 - ST - Propulsion Components: Injectors

ROOM

BRAMANTE 1

BRAMANTE 2

BRAMANTE 3

BRAMANTE 4

BRAMANTE 5

BRAMANTE 6

BRAMANTE 7

BRAMANTE 8

Chairperson	BRAMANTE 1	BRAMANTE 2	BRAMANTE 3	BRAMANTE 4	BRAMANTE 5	BRAMANTE 6	BRAMANTE 7	BRAMANTE 8
16:00	3124863 T6 Kaufman Ion Engine Development R. Lewis, QinetiQ, UK	3125330 Design transfer, development and testing of XR-5E Hall Effect Thruster M. Leslie, European Space Propulsion, UK	3124882 Choice of design parameters of the electrical rocket power propulsion system for delivery of large-size constructions into a geostationary orbit. I. Tkachenko, Samara, RU	3124656 Low-thrust liquid rocket thruster on ecologically pure monopropellant D. Goza, EDB Fakel, RU	3125096 Demonstration of Pressure Oscillation Reduction For a New Large Monolithic Motor S. Larrieu, Herakles Safran Group, FR	3125046 3D MILES simulation of a hybrid rocket with swirl injection J. Messineo, ONERA, FR	3125098 ORION European Service Module Propulsion Subsystem E. Rosenko, Airbus DS GmbH, DE	3124701 Flow Interaction by Multi Doublet Injectors C. Inoue, The University of Tokyo, JP
16:20	3125251 AIRBUS DS GmbH Radio Frequency Ion Thrusters and Systems for Scientific and Commercial Applications H. Leiter, Airbus DS, DE	3125331 Testing of XR-5 Hall Effect Thruster and MK3 power processing unit M. Leslie, European Space Propulsion, UK	3124903 Research and Development of Low-Power Arcjet Thrusters with Green Propellants of HAN and Water Y. Fukutome, Osaka Institute of Technology, JP	3125343 Space qualification of monopropellant LMP-103S P. Thormählen, ECAPS, SE	3125130 Modelling Chug Instabilities by Variable Time Lag Approach M. Leonardi, La Sapienza, IT	3125176 Simulations of GOX/HTPB Hybrid Rocket Flowfields Including Modeling of Fuel Pyrolysis and Thermal Radiation G. Leccese, Sapienza University of Rome, IT	3124696 FLPP ETID: Cryogenic Expander Technologies to Increase the Competitiveness of European Launchers T. Fuhrmann, Airbus Safran Launchers GmbH, DE	3125186 Characteristics of Liquid Flow according to Momentum Flux Ratio with Gas Excitation on Gas-Centered Swirl Coaxial Injectors G. Park, Seoul National University, KR
16:40	3124875 Current Status of NASA Evolutionary Xenon Thruster - Commercial (NEXT-C) M. Dolloff, NASA - Glenn Research Center, US	3125196 Development of a 20 kW-Class Hall Effect Thruster A. Leporini, SITAEL S.p.A, IT	3125284 Research on Electric Propulsion at ONERA D. Packan, ONERA, FR	3125363 Qualification of LMP-103S – an ADN-based satellite propellant S. Ek, FOI, SE	3125204 A specific aspect of aluminium combustion on SRM instabilities O. Orlandi, Herakles Safran Group, FR	3125213 Hybrid rocket technology demonstrator: status of design and development activities M. di Clemente, Italian aerospace research centre, IT	3125304 Architecture of a new Vega 3rd stage M. Genito, ELV, IT	3124836 Experimental and Numerical Investigation on Recess Variation of a Shear Coax Injector in a GOX-GCH4 Combustion Chamber S. Silvestri, Technische Universität München, DE
17:00	3125294 Annular Engine Concept and Development Status M. Patterson, NASA Glenn Research Center, US	3124638 MEPS Engineering Model Development and Test T. Misuri, SITAEL, IT	3124946 Development of a Very High Temperature Xenon Resistojet A. Grubisic, University of Southampton, UK	3124920 High Performance Green Propulsion - On the Way for Three Launches from Three Continents K. Anflo, ECAPS, SE	3124974 Biglobal Stability Analysis of the Oscillatory Taylor-Culick Flow Using the Multiple Time Scale Method P.J. Liu, Northwestern Polytechnical University, CN	3125219 Numerical Simulations of Flowfield and Combustion in Hybrid Rockets D. Bianchi, University of Rome "La Sapienza", IT	3124708 Recent Developments in the Demonstration Project for Technologies of a new Storable Propellant Upper Stage Application A. Goetz, Airbus Safran Launchers GmbH, DE	3124988 Experimental and theoretical analysis on compressible axisymmetric jet response to excitation H. Gu, Institute of Mechanics, C A S, CN
17:20	3125102 RIT- $\mu$ X system for future space missions: Coupled and endurance test C. Altmann, Airbus DS GmbH, DE	3124625 Magnetically Shielded Low Power Hall Effect Thruster T. Misuri, SITAEL, IT	3124734 Heater Chip with Different Microchannels Geometries for a Low Pressure Free Molecular Micro-Resistojet D. Cordeiro Guerrieri, TU DELFT, NL	3124942 HPGP® a Flight Proven Technology Selected for Multiple LEO Missions M. Persson, ECAPS, SE	3125019 Combustion Instability and Pressure Oscillation Numerical Simulation in Solid Rocket Motor M. Panelli, CIRA S.c.p.a, IT	3125228 Hybrid Propulsion: Potential Applications & Technical Challenges K. Odic, Airbus Defence & Space, FR	3125029 VINCI®, the European reference for Ariane 6 upper stage cryogenic engine J.M. Sannino, Airbus Safran Launchers, FR	3124815 Optical investigation of the LOX-Jet disintegration processes at high pressure conditions in a LOX/H2 single coaxial injector combustion chamber D. Suslov, Institute of Space Propulsion, DLR, DE
17:40	3125250 Testing Activities of a Radio Frequency Mini Ion Engine for the Next Generation Gravity Missions "NGGM" A. Mingo, Transmit GmbH, DE	3124751 Development of a Compact Hall Thruster with a C12A7 Low Power Cathode M. Tajmar, TU Dresden, DE	3124928 A 17.8-GHz Microwave Electrothermal Thruster for CubeSats and Small Spacecraft M. Micci, Penn State University, US	3124643 Development of a 400 N HDPE/HTP hybrid rocket motor G. Roberts, University of Southampton, UK	3125166 Lateral blowing impact on corner vortex shedding in solid rocket motors L. Lacassagne, Cerfacs, FR	3124985 Control of Low Frequency Combustion Instability in Hybrid Rocket Engine C. Lee, Konkuk University, KR		3125081 An Experimental and Numerical of a Vortex Injection Liquid Rocket Engine J.J. Marlow, Kingston University, UK
END OF DAY 2								

SPACECRAFT	SPACE TRANSPORTATION	GENERAL INTEREST
------------	----------------------	------------------

Wednesday May 4th, 2016

ROOM

PLENARY SESSION - TIZIANO

08:30

**KEYNOTE SPEECH: ARIANE 6 PROGRAMME STATUS**  
Stefano **BIANCHI**, Head of the Launchers Development Programmes, ESA

Session 25 - SC - GIEs (2)

Session 26 - SC- HET (3)

Session 27 - Magnetic Confinement Thrusters

Session 28 - SC - Chemical Thrusters: Monoprop & Biprop (1)

Session 29 - Modelling Chemical Propulsion (2)

Session 30 - ST - Sloshing Experiments (1)

Session 31 - ST - Green&New Propellants (1)

Session 32 - AM/3D Printing (2)

ROOM

BRAMANTE 1

BRAMANTE 2

BRAMANTE 3

BRAMANTE 4

BRAMANTE 5

BRAMANTE 6

BRAMANTE 7

BRAMANTE 8

Chairpersons

09:00

3125286  
**Development of a 5Kw class radio-frequency ion thruster system with extended performance envelop for full EP applications**  
J.P. Porst, Airbus DS GmbH, DE

3124890  
**Design and characterization of a 200W low power Hall thruster in "magnetic shielding" and "wall less" configurations**  
L. Grimaud, ICARE - CNRS, FR

3124901  
**Research and Development of Electrothermal Pulsed Plasma Thruster Systems for Small/Nano Satellites at Osaka Institute of Technology**  
H. Tahara, Osaka Institute of Technology, JP

3124933  
**S4 development status and demonstration test results**  
J. Deck, Airbus DS GmbH, DE

3125159  
**Large Eddy Simulations of high amplitude self-sustained acoustic oscillations in a rocket engine coaxial injector in the transcritical regime**  
T. Schmitt, EM2C Laboratory, CNRS, CentraleSupélec, Paris-Saclay University, FR

3124938  
**Experimental investigation of Liquid Nitrogen sloshing for space applications**  
M.R. Vetrano, von Karman Institute, BE

3124831  
**Green, Highly Throttleable Gelled Propellant Rocket Motors – State and Application Potentials**  
K.W. Naumann, Bayern-Chemie GmbH, DE

3125026  
**GKNs Additive Manufacturing abilities**  
U. Palmnas, GKN, SE

09:20

3125045  
**Double-sided ion thruster for contactless space debris removal**  
D. Mantas, University of Southampton, UK

3124911  
**A method to suppress the boundary of mode transition in Hall Thrusters**  
L. Han, Harbin Institute of Technology, CN

3125017  
**Updated Qualification and Delivery Status of the HEMPT based Ion Propulsion System for SmallGEO**  
D.S. Weis, Thales Electronic Systems GmbH, DE

3125184  
**Research and development status of 10N MMH/MON-3 bi-propellant ceramic thruster**  
G. Fujii, JAXA, JP

3125374  
**Large eddy simulation of the combustion and heat transfer of a model rocket engine**  
L. Potter, Cerfacs, FR

3125039  
**Experimental and numerical investigation of axial and lateral sloshing inside a large cylindrical tank**  
M. Stief, DLR e.v., DE

3124841  
**Influence of the Combustion Chamber Geometry on the Performance of a Gel Propulsion System**  
P. Kröger, German Aerospace Center (DLR), DE

3125246  
**Use of Additive Manufacturing to Develop Advanced Hybrid Rocket Designs**  
J. Catina, United States Naval Academy, US

09:40

3125352  
**Study of plasma parameters in gas discharge chamber of RF ion thruster with a flat coil enhanced with ferrite**  
P. Masherov, RIAME, RU

3124944  
**Erosion Reduction Measures in Anode Layer Type Hall Thruster**  
T. Schönherr, The University of Tokyo, JP

3124848  
**HEMPT Electric Propulsion Technology for Micro-Satellites**  
A. Genovese, Thales Deutschland, DE

3124907  
**Thruster Development in MH(Mitsubishi Heavy Industries, Ltd.)**  
T. Matsuo, Mitsubishi Heavy Industries, Ltd., JP

3124653  
**Numerical estimation on the acoustic damping characteristics of a simulated rocket chamber**  
T. Shimizu, JAXA, JP

3125342  
**Experimental Study on Sloshing with Phase Change using Liquid Nitrogen**  
D. Haba, University of Tokyo, JP

3124980  
**Long duration Trials of a Throttleable Gelled Propellant Rocket Motor**  
P. Caldas Pinto, Bayern Chemie, DE

3125090  
**Comparison of conventionally and 3D Printed Co-axial Swirl Injector for a Green Hypergolic Bipropellant Thruster**  
M.U. Bayramoglu, Olgun, Yilmaz, Donmez, Roketsan Missiles Inc., TR

10:00

3124834  
**Plasma local parameters measuring in the low power radio-frequency ion thruster discharge chamber with the help of multi-tip probes**  
V. Kozhevnikov, Moscow Aviation Institute (MAI); RIAME MAI, RU

3125368  
**Performance of a Low Power Magnetically Shielded Hall Thruster using a Conducting Discharge Channel**  
R. Conversano, JPL, USA

3125035  
**Progress in Lifetime Test of HEMPT Propulsion System**  
A. Lazurenko, Thales Electronic Systems, GmbH, DE

3125040  
**Performance and Design Description of the LTT-1, a UK Qualified and Flight Proven, Low Cost, High Performance 10N MMH/MON Thruster**  
R. Westcott, Moog ISP Westcott, UK

3124830  
**Development of Skeletal Kinetic Mechanism of Methane Oxidation for High Pressures and Temperatures**  
V. Zhukov, German Aerospace Center (DLR-Lampoldshausen), DE

3124604  
**Large-Scale Tank Active Sloshing Damping Simulation and Experiment**  
M. Konopka, Airbus DS GmbH, DE

3125163  
**Green Solid Propellants for Launchers**  
N. Wingborg, FOI, SE

3125362  
**Additive manufacturing design principals applied to European launch vehicles**  
O. Domhnall, Moog Dublin Limited, IE

10:30

COFFEE BREAK

	SPACECRAFT	SPACE TRANSPORTATION	GENERAL INTEREST						
Wednesday May 4th, 2016									
	Session 33 - SC - GIEs (3)	Session 34 - SC - HET (4)	Session 35 - EP Testing (1)	Session 36 - SC - Chemical Thrusters: Monoprop & Biprop (2)	Session 37 - ST - Air Breathing Propulsion	Session 38 - ST - Propulsion Components: Nozzles (1)	Session 39 - Overview of Current Programs (3)	Session 40 - AM/3D Printing (3)	
ROOM	BRAMANTE 1	BRAMANTE 2	BRAMANTE 3	BRAMANTE 4	BRAMANTE 5	BRAMANTE 6	BRAMANTE 7	BRAMANTE 8	
<b>Chairpersons</b>									
<b>11:00</b>	3125354 Measurement and numerical calculation of temperature in Radio-Frequency Ion Thruster K. Kruglov, RIAME MAI, RU	3124969 Fully 2D Numerical Simulation of a Nested Channel Hall Thruster H. Dragnea, University of Michigan, US	3124826 Towards standardisation of the EP testing and qualification D. Feili, ESA/ESTEC, NL	3124952 Aerojet Rocketdyne Monopropellant Thruster Design, Qualification and Flight Heritage O. Morgan, Aerojet Rocketdyne, US	3125033 Experimental Setup on Transpiration Cooling in Supersonic Combustion Ramjets (SCRamjets) F. Strauss, German Aerospace Center DLR, DE	3125309 VINCI Engine Composite Nozzle Extension for Ariane 6 H. Coperet Airbus Safran Launchers, FR	3125241 Boreas demonstrator for next generation engines T. Jues, CNES, FR	3125301 Aerojet Rocketdyne's Ultra-Low-Cost Bantam Liquid Rocket Engine Family for Low-Cost Launch Applications J. Castro, Aerojet Rocketdyne, US	
<b>11:20</b>	3124730 Analytical and Computational Modeling of Inductively Coupled Plasmas for an Application to the RF Ion Thruster V. Nigmatzyanov, Moscow Aviation Institute (MAI), RU	3124994 Hall-effect thruster virtual lab F. Taccogna, Cnr, IT	3124737 Development and Operation of the QinetiQ Electric Propulsion Test Facility S. Clark, QinetiQ, UK	3125004 Thermal Ignition of ADN-based Propellants M. Negri, DLR, DE	3124977 Hydrogen-fueled Scramjet Tests in JF-12 shock tunnel C. Wang, Institute of Mechanics, Chinese Academy of Sciences, CN	3125025 Sandwich NE for Vinci evolution K. Lindblad, GKN, SE	3125287 P5.2 Test Facility for Testing new Ariane 6 Cryogenic Upper Stage (ULPM) G. Krühsel, German Aerospace Center (DLR), DE	3124723 Development and testing of an additive manufactured catalyst bed for HTP thruster applications G. Roberts, University of Southampton, UK	
<b>11:40</b>	3124922 Plasma Modelling of a Micro Newton RIT 2.5 R. Henrich, Justus Liebig University of Giessen, DE	3125065 Hybrid Simulation of Magnetic Field Effect in the Plume of a Hall Thruster M. Choi, University of Michigan Ann Arbor, US	3125134 CIRA Roadmap for the Development of Electric Propulsion Test Facilities D. Ricci, CIRA - Centro Italiano Ricerche Aerospaziali, IT	3124683 Propulsion subsystem for the ExoMars entry and descent module (2016 Mission demonstrator) G. Lubrano di Scampamorte, Thales Alenia Space France, FR	3124988 Analysis of Thermal Throat Characteristics of a Wide-Range RBCC Combustor at Ramjet Mode F. Luo, Beijing Power Machinery Institute, CN	3124642 Sea-Level Transitioning Dual Bell Nozzles R. Stark, German Aerospace Center, DE	3124786 Hybrid Propulsion Solutions for Space Debris Remediation Applications M. Faenza, Nammo Raufoss, NO	3125070 Additive manufacturing applied to liquid propulsion & equipment parts for next generation launcher – hurdles & challenges along the value chain S. Beyer, Airbus Defence & Space, DE	
<b>12:00</b>	3125355 Simulation of ion thruster electrodes temperature deformation A. Mogulkin, RIAME MAI, RU		3124791 Improvements of the advanced electric propulsion diagnostics platform C. Bundesmann, Leibniz-Institute of Surface Modification, DE	3124916 Cost optimization and qualification of 20N monopropellant thruster type CHT20N-3 U. Gotzig, Airbus DS GmbH, DE	3125073 A Study on Control Law of Mode Transition for Turbo-aided Rocket-augmented Ramjet Combined Cycle Engine Y. Zheng, Beijing Power Machinery Research Institute, Science and Technology on Scramjet Laboratory, CN		3124646 Use of schematic decisions at creation of advanced LOX-kerosene rocket engines of first stages of launch-vehicles on base of RD191 engine O. Safin, NPO Energomash, RU	3124878 Selective laser melting (slm) of Inconel 718 and stainless steel injectors for liquid rocket engines S. Soller, Airbus Safran Launchers, DE	
<b>12:20</b>	3124614 High-precision power measurement for accurate characterization of RF ion thrusters J. Simon, TH Mittelhessen, DE	3124925 Hollow Cathodes Development at Sitael S.p.A. D. Pedrini, Sitael S.p.A.	3124997 Qualification of the AEPD system as a Standard On-ground Tool for Electric Propulsion Thrusters – Status and Perspectives F. Scortecci, Aerospazio Tecnologie srl, IT	3125108 Investigation of the catalyst degradation mechanism for monopropellant thruster M. Naoki, IHI aerospace, JP	3125083 An assistant scramjet combustor cooling method based on the air sucked from isolator Z. Chenguang, No.31 Research Institute of China Aerospace Science and Industry Corporation, CN	3124950 Investigation of flow behavior in a cold flow C/C-SiC nozzle C. Génin, DLR, DE	3125110 Development of Post Boost Stage for the Epsilon Launch Vehicle S. Koga, IHI Aerospace Co., Ltd., JP	3125220 Additive manufacturing design optimised bipropellant injector S. Hyde, European Space Agency, NL	
<b>12:40</b>	<b>LUNCH</b>								
<b>ROOM</b>	<b>PLENARY SESSION - ROOM TIZIANO</b>								
<b>14:00</b>	<b>PLENARY ROUND TABLE ADDITIVE LAYER MANUFACTURING</b>								
<b>15:30</b>	<b>COFFEE BREAK</b>								

SPACECRAFT		SPACE TRANSPORTATION		GENERAL INTEREST		Wednesday May 4th, 2016											
Session 41 - SC -Plasma and Thrusters (1)		Session 42 - SC -HET(5)		Session 43 - EP testing (2)		Session 44 - SC -Propulsion Components MEMS		Session 45 - Advanced Hybrid Concepts		Session 46 - ST - Testing (1)		Session 47 - ST - Green&New Propellants (2)		Session 48 - Propulsion components (1)			
ROOM	BRAMANTE 1	BRAMANTE 2	BRAMANTE 3	BRAMANTE 4	BRAMANTE 5	BRAMANTE 6	BRAMANTE 7	BRAMANTE 8	BRAMANTE 1	BRAMANTE 2	BRAMANTE 3	BRAMANTE 4	BRAMANTE 5	BRAMANTE 6	BRAMANTE 7	BRAMANTE 8	
<b>Chairpersons</b>																	
<b>16:00</b>	3125002 Numerical Simulation of ADD SIMPLEX Pulsed Plasma Thruster Based on a Modified Electromechanical Model X. Liu, University of Stuttgart, DE	3125099 Test of a Dual-Mode Hollow Cathode for Hall Effect Thrusters M. Coletti, Mars Space Ltd, UK	3125007 Vibration Isolation System for Micro-Newton Thrust Measurements E. Bosch Borrás, European Space Agency, NL	3125005 State space modeling of fluid flow for thrust control in MEMS-based micropropulsion M.A. de Athayde Costa e Silva, Cervone, Delft University of Technology, NL	3124677 Analysis and Preliminary Design of a Hybrid Propulsion Lunar Lander C. Schmierer, Deutsches Zentrum für Luft- und Raumfahrt, DE	3124991 Investigation of pressure hammer with wire mesh sensors and high speed imaging techniques T. Traudt, DLR Lampoldshausen, DE	3124793 Alkali metal-water combinations as rocket engine propellant: experimental assessment for their capability T. Hiraiwa, JAXA, JP	3124827 Transfer function identification of POGO system device A. Simon, CNES, FR									
<b>16:20</b>	3125062 Development of a numerical model for the optimization of pulse plasma thrusters performance S. Ciarralli, Mars Space Ltd, UK	3125116 System Analyses on the 100 W Brand-New CIRA HE Thruster F. Battista, Italian Aerospace Research Centre, IT	3125103 From Development to Measurements: A High Sensitive Vertical Thrust Balance for Pulsed Plasma Thrusters C. Montag, Institute of Space Systems (IRS) at University of Stuttgart, DE		3124750 Effect of Fuel-to-Oxidiser Ratio on Thrust Generation of a Hybrid Al + NaOH + H2O Propulsion System for CubeSat Applications O.D. Ahmed, University of Surrey, UK	3125317 Experimental Study of a Laser Ignited Advanced Porous Injector (API) Thruster Configuration M. Börner, DLR, DE	3125000 Hydrogen Generation by Aluminum-Water Reaction for Propulsion J. Zhang, Dalian Institute of Chemical Physics, CN	3124731 The Evolution of the Ariane 5 Attitude Control System SCA for the Galileo Launcher & Mission D. Welberg, Airbus DS GmbH, DE									
<b>16:40</b>	3125014 Maiden tests of the HPT05 Helicon Plasma Thruster Prototype M. Merino, Universidad Carlos III de Madrid, ES	3125164 Temporal Evolution of the Performance and Channel Erosion of a 5 kW-Class Hall Effect Thruster Operating With Alternative Propellants T. Andreussi, Sitael S.p.A., IT		3125151 Miniaturised components for satellite propulsion using MEMS technology T.A. Gronland, NanoSpace, SE	3124745 Numerical Simulation of an Isochore Combustion Chamber for Hybrid Rocket Propulsion F. Barato, Università di Padova, IT	3124761 Wet-Priming Test Campaign with Live Propellant Hydrazine and Analysis Correlation A. Pasquier, OHB System, DE	3125258 AlH3-based solid propellant development and characterization in GRAIL H2020 project F. Maggi, Politecnico di Milano, IT	3124965 Analytical estimation of electropump supply system application reasonability for liquid rocket engines A. Dibirnyy, Yuzhnoye SDO, UA									
<b>17:00</b>	3125222 Two-Dimensional Plasma Flow Measurement in Radio-Frequency Inductive Acceleration of Low-Aspect-Ratio Electroless Plasma T. Matsuguma, The university of Tokyo, JP	3125199 II. Long-Life Low Erosion Hall Effect Thruster: Model and Comparison V. Giannetti, Sitael S.p.A., IT	3124822 ESA Propulsion Laboratory at ESTEC K. Dannenmayer, ESA, ESTEC, NL	3124766 Three-dimensional lithography for the microfabrication of colloid emitters T. Henning, Justus Liebig University, DE	3125104 Investigation of orbit raising to GEO with combined chemical/electric propulsion systems Q.H. Le, Institute for Space Systems, DE	3124754 Experimental investigation of Liquid Nitrogen Chilledown Two Phase Flow L. Peveroni, von Karman Institute, BE	3125268 Recycling of packaging for Obtain Paraffin Doped with Aluminum Nanoparticles Used as Fuel in Hybrid Rockets – Characterization and Thermodynamic Studies R.H. Araujo, University of Brasilia, BR	3124667 Study of a Rhenium/Iridium combustion chamber F. Xu, Aerospace Research Institute of Material and Processing Technology, CN									
	Session 49 - SC - Plasma and thrusters (2)	Session 50 - SC -HET (6)	Session 51 - EP subsystems - Neutraliser (1)	Session 52 - ST - Cost Related Aspects	Session 53 - Modelling Chemical Propulsion (3)	Session 54 - ST - Sloshing Experiments (2)	Session 55 - Overview of Current Programs (4)	Session 56 - Propulsion components (2)									
ROOM	BRAMANTE 1	BRAMANTE 2	BRAMANTE 3	BRAMANTE 4	BRAMANTE 5	BRAMANTE 6	BRAMANTE 7	BRAMANTE 8	BRAMANTE 1	BRAMANTE 2	BRAMANTE 3	BRAMANTE 4	BRAMANTE 5	BRAMANTE 6	BRAMANTE 7	BRAMANTE 8	
<b>Chairpersons</b>																	
<b>17:20</b>	3124719 Aspects of providing the requirements of spacecraft resistance to electro physical space factors O. Gornshkov, Tsniimash, RU	3125333 Experimental Investigations of the Effects of Cathode Coupling Voltage on Thruster Efficiency Considering the Magnetic Field Separatrix N. Turan, Bogazici University, TR	3125366 Heaterless Hollow Cathode Technology - A Critical Review D. Lev, Rafael, IL	3124693 The environmental life cycle of green propellants J.B. Pettersen, Asplan Viak, NO	3125076 Investigation of orbit correction via pulses generated by a small thruster ejecting a weight A. Gary, Technion – Israel Institute of Technology, IL	3124996 Cryo-Laboratory for Test and Development of Propellant Management Technologies J. Gerstmann, DLR Institute of Space Systems, DE	3125142 CIRA Roadmap for the Development of Liquid Propulsion Test Facilities N. Favalaro, C.I.R.A., IT	3125290 Development of High Pressure Fluid SMD Components H.P. Harmann, AST Advanced Space Technologies GmbH, DE									
<b>17:40</b>	3125283 Initial Mapping of Steady State Applied-Field Magnetoplasma dynamic Thruster SX3 A. Boxberger, Institute for Space Systems, University of Stuttgart, DE	3125367 Power Deposition in Co-Axial Hall Thrusters D. Lev, Rafael, IL	3124900 Physics of a heated LaB6 cathode for Hall thrusters. Part I: Experimental examination R. Jousset, CNRS, ICARE, FR	3124735 Market Analysis and Technology Roadmap for Cost-Effective and Reliable Upper Stages G. De Crombrughe, SpaceTec Partners, BE	3124783 Analysis of supercritical methane in rocket engine cooling channels L. Denies, Delft University of Technology, NL	3125273 Design and Development of 2000 kg Linear Shaker Platform for Spacecraft Propellant Tank Slosh Behavior Validation and Research D. Kirk, Florida Institute of Technology, US	3124611 Cooperative Development of L75 LOX Ethanol Engine: Current Status with Focus on Capacitive Chamber Testing D. Almeida, Instituto de Aeronautica e Espaco, BR	3125379 Solar Orbiter Purge System: Modelling with Ecosim M. Marchionni, N. Croisard, Airbus Defence and Space Ltd, UK									
<b>18:00</b>	3124913 Development and validation of a 2D wave-plasma code for Helicon Plasma Thrusters B. Tian, Universidad Carlos III de Madrid, ES	3124921 NanoFEPP – Highly miniaturized FEPP propulsion system for attitude and orbit control of CubeSats D. Bock, TU Dresden, DE	3125218 Influence of Power throughout Heaterless Hollow Cathode Ignition A. Daykin-Iliopoulos, University of Southampton, UK	3125121 The long term space transportation cost forecast from the perspective of launch capability and GDP per capita D. Goto, JAXA, JP	3124788 Turbulence Modelling and Cavitation Dynamics in Cryogenic Turbopumps K. Mani, Delft University of Technology, NL	3124682 Experiments on Sloshing for Space Applications at ESA-ESTEC A. Passaro, ATG Europe B.V, NL	3125262 NASA's Evolvable Cryogenics (eCryo) Project M. Meyer, NASA Glenn Research Center, US	3125247 Electronic Pressure Regulator for Liquid Propulsion Rockets P. Tattosian, CNES, FR									
<b>END OF DAY 3</b>																	
<b>19:30</b> <b>23:30</b>	<b>GALA DINNER / Villa Miani</b>																

	SPACECRAFT	SPACE TRANSPORTATION	GENERAL INTEREST															
Thursday May 5th, 2016																		
	Session 57 - SC - Plasma Thrusters (3)	Session 58 - SC - HET (7)	Session 59 - EP testing (3)	Session 60 - SC - Green Propulsion for Spacecraft (2)	Session 61 - Pressure-Thrust Oscillation Issues (2)	Session 62 - ST - Propulsion Components: Nozzles (2)	Session 63 - EP subsystems - Electronics	Session 64 - Flight testing and experience										
ROOM	BRAMANTE 1	BRAMANTE 2	BRAMANTE 3	BRAMANTE 4	BRAMANTE 5	BRAMANTE 6	BRAMANTE 7	BRAMANTE 8										
Chairpersons																		
09:00	3124902 Research and Development of High Power Steady-State MPD Thrusters with Permanent Magnets and Hollow Cathodes for In-Space Propulsion Y. Sugiyama, Osaka Institute of Technology, JP	3125211 Investigation of SPT-20.8 plume by means of optical emission spectroscopy method with the scanning of plasma through collimator A. Khaustova, Zhukovskiy National Aerospace University, *KNAI, UA	3124797 An Interlaboratory Comparison of Thrust Measurements for a 200W Quad Confinement Thruster A. Knoll, Surrey Space Centre, UK	3124918 Advancing the ADN-Based Monopropellant Thruster Family for Space Flight K. Anflo, ECAPS, SE	3125298 Vorticity Patterns, Sound Generation, Pressure and Thrust Oscillations in Air-Finocyl SRM E. Cavallini, Sapienza University of Rome, IT	3124657 / 3124818 ARIANE 5 MPS ARTA 6 FIRING TEST F. Dufour / G. Mastrangelo Herakles, FR / EUROPROPULSION, FR	3125321 Finmeccanica capabilities in Electronics and Components for micro-Propulsion A. Polli, Finmeccanica, IT	3124889 On the development and demonstration of the NanoSpace CubeSat Propulsion module with Close-loop Thrust Control K. Palmer, NanoSpace AB, SE										
09:20	3124983 Development of an engineering optimization tool for miniature Pulsed Plasma Thrusters I. Golosny, University of Southampton, UK	3125256 Testing KLIMT prototypes at IPPLM and ESA Propulsion Laboratories J. Kurzya, Institute of Plasma Physics and Laser Microfusion, PL	3125191 New Design of RPA for High Accuracy and High Resolution Measurements on for ion thrusters like $\mu$ N-RIT P. Köhler, 1st physics institute, DE	3124923 Towards satellite Propulsion with HAN-Based Green Monopropellants J. Liu, Shanghai Institute of Space Propulsion, CN	3125299 Ignition Transient Analysis of the First Stage SRM of VEGA-C Launch Vehicle E. Cavallini, Sapienza University of Rome, IT	3124978 The separation pattern transitions in the single expansion ramp nozzle influenced by external flows Y. Yu, Jiangsu Province Key Laboratory of Aerospace Power System, Nanjing University of Aeronautics and Astronautics, CN	3124813 Power Processing Unit Activities at Thales Alenia Space Belgium (ETCA) E. Bourguignon, Thales Alenia Space Belgium, BE	3124792 Enhancement of thermal propellant gauging accuracy based on wide application in-flight experience B. Busset, Airbus Defence and Space Satellites, FR										
09:40	3125054 Design and Test of a Cylindrical IEC Prototype Thruster D. Petkow, Gradel sari, LU	3125288 EMI Dependence on Facility Chamber Pressures using the SPT-140 DM4 Hall Thruster R. Spektor, The Aerospace Corporation, US	3124698 Diagnostics of Ionic Electro spray Thrusters D.G. Courtney, Ecole Polytechnique Federale de Lausanne, CH	3124774 Hot Firing of a N2O/C2H4 Premixed Green Propellant: First Combustion Tests and Results L. Werling, DLR - German Aerospace Center, DE	3125300 Vorticity Driven Pressure Oscillations during Quasi-Steady State of the First Stage SRM of VEGA-C Launch Vehicle E. Cavallini, Sapienza University of Rome, IT	3125162 Original concept of petal extendible nozzle, with composite flaps G. Cotrait, Safran Herakles, FR	3125086 Optimized 5 kW PPU for Gridded Ion Engine J. Palencia, Airbus DS, ES	3124718 Mono-Propellant Propulsion Subsystem constellation: Flight experiences from Globalstar 2 to Iridium-Next P. Capus, Thales Alenia Space, FR										
10:00	3125279 Pulsed Plasma Thruster as a technology demonstrator on PEGASUS C. Scharlemann, University of Applied Sciences Wiener Neustadt, AT	3125322 Global Model Based Development of a Hall Type Electric Thruster Using I2 Propellant K. Katsonis, Dedalos Ltd, GR	3125057 Electromagnetic Emissions from the Fake SPT-100 Thruster Measured in the New Aerospazio EMI Test Facility F. Scortecchi, Aerospazio Tecnologie srl, IT	3124769 Numerical Calculation of Heat Flux Profiles in a N2O/C2H4 Premixed Green Propellant using an Inverse Heat Conduction Method N. Perakis, Technical University of Munich, DE	3125230 Portable system for accurate unsteady pressure oscillations measurement in a middle scale SRM demonstrator J. Anthoine, ONERA - The French Aerospace Lab, FR	3124777 ARIANE 6 & VEGA-C Programs - The P120C SRM Nozzle E. Gautronneau, Airbus Safran Launchers, FR	3124852 Design and qualification of the PPU MK3 for 5 kW hall effect thrusters S. Fraselle, Thales Alenia Space Belgium, BE	3124919 Concluding a 5 year In-Space Demonstration of an ADN-Based Propulsion System on PRISMA K. Anflo, ECAPS, SE										
10:20	3125339 Pulsed Plasma Thruster with Non-Volatile Propellant: The Way Forward S. Barral, QuinteScience, PL	3125326 Evaluation of Electron Emission Characteristics on Radio Frequency Plasma Cathode for Hall Thruster M. Ichimura, Tokyo Metropolitan University, JP	3125058 The Aerospazio's Lifetest Facilities and Diagnostics Tools for the HEMPT Qualification Programme F. Scortecchi, Aerospazio, I	3125064 Research on 1N Monopropellant Thruster Using Hydrogen Peroxide for Small Satellites Q. Lin, Shanghai Institute of Space Propulsion, CN	3124820 POD-X: SRM Pressure Oscillation Demonstrator G. Mastrangelo, EUROPROPULSION, FR	3124853 A new nozzle contouring concept M. Frey, Airbus DS, DE	3125117 Electric Propulsion activities in Airbus DS N. Wagner, Airbus DS, DE	3125117 The Propulsion Qualification Model for the Orion ESM Propulsion Subsystem M. Michaelis, Airbus Defence and Space GmbH, DE										
10:40	COFFEE BREAK																	



	SPACECRAFT	SPACE TRANSPORTATION	GENERAL INTEREST																							
Thursday May 5th, 2016																										
	Session 65 - SC -Plasma Thrusters (4)	Session 66 - EOL Issues and Debris Management	Session 67 - EP testing (4)	Session 68 - SC - Green Propulsion for Spacecraft (3)	Session 69 - Modelling Chemical Propulsion (4)	Session 70 - Test Facilities (1)	Session 71 - Microgravity Propellant Modelling & Test (1)	Session 72 - Future Space Transportation																		
ROOM	BRAMANTE 1	BRAMANTE 2	BRAMANTE 3	BRAMANTE 4	BRAMANTE 5	BRAMANTE 6	BRAMANTE 7	BRAMANTE 8																		
Chairpersons																										
11:10	3125009 <b>Performance of the CubeSat Ambipolar Thruster</b> J.P. Sheehan, University of Michigan, US	3124678 <b>Comparison of Methods and Devices for High Pressure Vessel Passivation</b> B. Zitouni, OHB, FR	3124676 <b>Far-Field Beam Diagnostics at DLR's EP Test Facility</b> A. Neumann, DLR German Aerospace Center, DE	3124715 <b>Development of a high-performance hydrogen peroxide monopropellant thruster for launcher applications</b> J.E. Rønningen, Nammo Raufoss, NO	3124632 <b>Final test campaign on fluidic mock-up for Exomars EDM propulsion design validation (with hydrazine)</b> F. Lavery, Thales Alenia Space, FR	3125233 <b>Development of a test facility for investigating the solid rocket motor base region in representative external flow conditions</b> L. Pascal, ONERA - The French Aerospace Lab, FR	3124823 <b>Numerical simulations of liquid hydrogen behavior in cryogenic tanks under microgravity conditions</b> F. Mathey, Air Liquide, FR	3125077 <b>The Choice of High Trust Liquid Propulsion Stages in Human Exploration of the Solar System</b> F. Gamgami, OHB System AG, DE																		
11:30	3125244 <b>Experimental characterization of a kW-level radio-frequency plasma thruster for project SAPERE-STRONG</b> F. Trezzolani, CISAS-University of Padova, IT	3125249 <b>Design, Manufacturing and Characterisation of the Impulse Transfer Thruster for an Ion Beam Shepherd Mission</b> M. Smirnova, TransMIT GmbH, DE	3125100 <b>Local Plasma Parameter Measurement in Stationary Plasma Thruster</b> M. Titov, Zhukovskiy National Aerospace University, "KhAI", UA	3125136 <b>Development of a catalyst for highly concentrated hydrogen peroxide</b> J.Y. Lestrade, Onera, FR	3124867 <b>Multiphase fluid hammer with cryogenic fluids</b> J.B. Gouriet, von Karman Institute, BE	3125318 <b>European Test Centre DLR Lampoldshausen, shaping the future</b> K. Schäfer, DLR, DE	3125272 <b>An Improved Approach for Measurement of Liquid Surface Tension and Contact Angle with Application to Propellants</b> D. Kirk, Florida Institute of Technology, US	3125260 <b>Low Cost Liquid Propulsion Systems for Launch-, InSpace and SpaceTourism Applications</b> P. Dr. Weuta, WEPA-Technologies GmbH, DE																		
11:50	3125348 <b>Characterization of plasma jet properties of an Inertial Electrostatic Confinement (IEC) plasma thruster by electrostatic probe</b> Y.A. Chan, Institute of Space System, University of Stuttgart, Germany, DE		3124714 <b>Measurement of Forces in the Beam of Ion Sources and in the Plume of Sputter Targets</b> A. Spehmann, University of Kiel, Institute of Experimental and Applied Physics, DE	3125325 <b>A Systems Approach for the Transition of NASA Missions to Green Propulsion</b> C. Bacha, NASA GSFC, US	3125133 <b>Improving combustion chamber and pipe components of the European Space Propulsion System Simulation (ESPSS) library with AUSM scheme</b> M. Leonardi, La Sapienza, IT	3124606 <b>A computer system for a test bench – spoilt for choice</b> W. Stuchlik, DLR, DE	3124637 <b>Baffle concepts for Center of Mass and Sloshing Control for propellant tanks</b> J. Klatte, Airbus Defense and Space, DE	3125248 <b>Trade offs and design choices for propulsion systems for Lunar exploration</b> R. Schonenborg, Schonenborg Space Engineering BV, NL																		
12:10	3124949 <b>Kinetic modelling of collisionless electron cooling on magnetized plasma expansions</b> S. Correyero, UC3M, SP	3125008 <b>Make-Safe or Deplete – Propulsion Passivation Ranking</b> M. Lau, OHB-System AG, DE	3124674 <b>Magnetic Fields and Ion Thruster Beam Effects in DLR's EP Test Facility</b> A. Neumann, DLR German Aerospace Center, DE	3125088 <b>Development of a Satellite Propulsion Components for Using Hydrogen Peroxide Propellant</b> K.C. Tseng, National Space Organization, TW	3124743 <b>Transient Performance Simulation for the ORION-ESM Propulsion Subsystem</b> F. Di Matteo, ESA/ESTEC, NL	3124695 <b>"L42" technology demonstrator: operational experience</b> J. Sender, German Aerospace Centre (DLR), DE	3125350 <b>A CFD Numerical tool for the prediction of cryogenic propellant behavior in spatial launchers</b> F. Mathey, Air Liquide, FR	3124760 <b>Optimization of space transport system consists of high load capacity launch vehicle, booster with liquid propellant system and space tug with an electric propulsion system for delivery of unmanned and manned space vehicles to the Moon</b> O. Starinova, Samara State Aerospace University, RU																		
12:30	3124945 <b>Liquid and Gaseous Propellant Alternatives for Versatile PPT Operation</b> T. Schönherr, The University of Tokyo, JP	3125181 <b>The Satellite Sweeper Approach for the Solution of the Space Debris Problem</b> P. Pergola, Sitael, IT	3124679 <b>Measurement of plasma parameters within the discharge channel of a Halo thruster</b> T. Wantock, University of Surrey, UK	3124833 <b>Investigation of Hypergolicity of Liquid Fuels with White Fuming Nitric Acid</b> H. Esiyok, Roketsan Missile Industries, TR	3124776 <b>Progress in Coupled Simulation Propulsion System and Vehicle with ESPSS Satellite Library</b> C. Koppel, KopooS Consulting Ind., FR	3125371 <b>A new HMS for the MASCOTTE cryogenic test bench</b> A. Iannetti, CNES, FR	3125338 <b>Passivation Valve for Satellites Propulsion System</b> M. Zaberchik, Rafael, IL	3125378 / AP2 <b>SLS Evolution for future Missions</b> S. Creech and C. Crumby, NASA, US																		
12:50	LUNCH																									

SPACECRAFT	SPACE TRANSPORTATION	GENERAL INTEREST
------------	----------------------	------------------

Thursday May 5th, 2016

ROOM									PLENARY SESSION - TIZIANO																	
14:20																		<b>PLENARY ROUND TABLE LOX METHANE</b>								
15:50																		<b>COFFEE BREAK</b>								
Session 73 - EP Propellant Management (1)		Session 74 - RAM-EP			Session 75 - EP subsystems - Neutraliser (2)			Session 76 - SC - Green Propulsion for Spacecraft (3)			Session 77 - ST - LOX / CH4 Propulsion (2)			Session 78 - ST - SRM (2)			Session 79 - Overview of Current Programs (5)			Session 80 - ST - Propulsion Components: Combustion Chambers (2)						
ROOM	BRAMANTE 1			BRAMANTE 2			BRAMANTE 3			BRAMANTE 4			BRAMANTE 5			BRAMANTE 6			BRAMANTE 7			BRAMANTE 8				
Chairpersons																										
16:20	3125316 New component developments for electric propulsion system A. Moureaux, Air Liquide Advanced Technologies, FR			3124973 Diagnostics of ABET by Optical Emission Spectroscopy Ch. Berenguer, DEDALUS, GR						3125179 Design and Testing of a 98% H2O2 Pulsed Thruster A. Pardini, Sitael, IT			3125137 Investigation on the Transcritical Behaviour of Methane and Numerical Rebuilding Activities in the Framework of ASI/JAXA Cooperation Project D. Ricci, CIRA - Centro Italiano Ricerche Aerospaziali, IT			3124895 Controllable Solid Propulsion Technologies for Space Applications P. Ceubet, Herakles, FR			3125302 Challenges on modelling fluid-dynamic problems of space propulsion systems. Overview of selected programmatic efforts at the European Space Agency J. Longo, ESA, Technical Centre ESTEC, NL			3125028 RD815 engine preburner demonstrator development A. Kukhta, Yuzhnoye SDO, UA				
16:40	3125194 Electric propulsion system trade-off analysis based on alternative propellant selection V. Giannetti, Sitael S.p.A., IT			3125202 Experimental Validation of a RAM-EP Concept based on Hall Effect Thruster Technology G. Cifali, Sitael S.p.A., IT			3124790 Performance Modelling of a Radio Frequency Plasma Bridge Neutralizer F. Scholze, Leibniz-Institute of Surface Modification, DE			3124684 Realistic Testing of PX1 Catalyst Using Near-Anhydrous Hydrogen Peroxide A. Musker, DELTACAT Ltd, UK			3125152 LOX/GCH4 Heat Sink Combustion Chamber: Numerical Rebuilding of Experimental Data D. Cardillo, CIRA, IT			3125257 Modeling Alumina Particles Evolution and Break-up in SRM D. Simone, University of Brasilia (UnB) at Gama, BR			3124856 DS2000 Propulsion System, Propellant Loading Service S. Ziegenhagen, AIRBUS DS GmbH, DE			3125107 Regenerative Cooling Performance Analysis of the LE-5B Engine Combustion Chamber H. Negishi, JAXA, JP				
17:00	3125240 Fundamental experiments with liquid propellants for the microwave-discharge ion thruster Y. Nakagawa, The University of Tokyo, JP			3124972 CO2 / N2 Breathing Electric Thrusters for LMOs K. Katsonis, DEDALOS Ltd, GR			3125361 Achievements of SELEX ES PPU and Neutralizer L. Ceruti, Selex ES, IT			3124844 Development of near-anhydrous hydrogen peroxide (? 97%) for satellite propulsion and assessment of material compatibility for fluidic components and light weight propellant tanks M. Wolf / P. Christ, Airbus DS GmbH / Evonik Industries AG, DE			3125154 CFD Support to the Design of the Injection Plate in the Framework of the ASI/JAXA Cooperation in LO2/LCH4 Propulsion D. Cardillo, CIRA, IT			AP3 SLS Booster Development Status A. Priskos, NASA, US			3124816 HF Combustion Stability - Research Activities in Germany R. Kaess, Airbus Defence and Space, DE			3124639 Comparison of Oxygen-Hydrogen Combustion Visualisation Techniques Under Representative Conditions S. Webster, DLR, DE				
17:20	3124736 Diamondoids as alternative propellants for ion thrusters K. Holste, Justus-Liebig-University Giessen, DE			3124981 Various Propellants applied to an IPG for an Air-Breathing Electric Propulsion System F. Romano, Institut für Raumfahrtssysteme (IRS), University of Stuttgart, DE			3125173 Experimental and theoretical investigation of thermal fluxes distribution in heaterless hollow cathode construction for 10-50A current range A. Tsaglov, National Aerospace University, UA			3124845 Pyroshock testing of high-strength hydrogen peroxide L. Krogstie, Nammo Raufoss AS, NO			AP4 Foundational Methane Propulsion Related Technology Efforts, and Challenges for Applications to Human Exploration Beyond Earth Orbit T.M. Brown, NASA, US			3124722 Particle detection & size evaluation in solid propellant flames via experimental image analysis, in order to improve two-phase flow simulation in rocket engines M. Nugue, ONERA, FR			3124951 Status of FLPP Propulsion Demonstrators -Technology Maturation, Application Perspectives K. Underhill, European Space Agency, FR			3124720 Effects of Fuel Temperature on Dynamic Characteristics of GOx/Kerosene Combustion W. Song, Korea Aerospace University, KR				
17:40	3125332 Development of a Spherical COPV over a thin wall titanium liner Y. Seri, RAFAEL, IL			3125269 Water "In-Space" Electrical Propulsion System For Future Deep Space Mission N. Yuichiro, Splijje L.L.C., JP			3125275 A Novel Multi-Channel Hollow Cathode for Low-Power Applications L. Habl, University of Brasilia, BR			3124770 Development of Metallic Foam Monolithic Catalysts for Green Monopropellants Propulsion A. Shchetkovskiy, Plasma Processes, LLC, US			3125053 LOX - LCH4 propulsion engine for re-usable launch system M. Rudnykh, AVIO S.p.A, IT			3125027 Analytical Techniques For Structural Analysis of Solid Rocket Motors Y. Erturan, Roketsan AS, TR			3124885 Overview of the Euclid Reaction Control System and Micro Propulsion Feed Assembly R. Delanoë, OHB Sweden, SE			3124891 Hot-fire Testing of Development Booster Engine for H3 Launch Vehicle D. Watanabe, JAPAN, JP				
18:00	3125198 Development of an Electronic Pressure Regulation System with Proportional Control Valve for Xenon-fed Electric Propulsion Systems P. Boyle, Marotta Controls, US			3125078 Impact of Dielectric Separation on Transition Point and Accessible Flow Enthalpy of Inductive Plasmas A. Chadwick, University of Adelaide, AU			3125365 Cathode Test Facility at Rafael D. Lev, Rafael, IL			3125071 Development of a Satellite-Level Propulsion System by Using Hydrogen Peroxide Propellant T.C. Kuo, National Space Organization, TW			3125170 System analysis on CIRA Ground Test Facilities and Liquid Rocket Engines using the EcosimPro ESPSS tool G. Elia, CIRA, IT			3124886 P120C Solid Rocket Motor: the common propulsive module for next generation European Launch Vehicles M. Cutroni, Europropulsion, FR			3124697 HYPROGEO project technical challenges and coordination A. Lecossais, AIRBUS Defence and Space, FR			3124943 Development of a direct spark ignition system for restartable upper stage engines R. Matthijssen, Aerospace Propulsion Products BV, NL				
18:20	<b>END OF DAY 4</b>																									

	SPACECRAFT	SPACE TRANSPORTATION	GENERAL INTEREST															
Friday May 6th, 2016																		
	Session 81 - EP Propellant management (2)	Session 82 - Processes and Manufacture (1)	Session 83 -EP New Concepts (2)	Session 84 - SC-Plume Interaction	Session 85 - Modelling Chemical Propulsion (5)	Session 86 - ST - Propulsion Components: Tanks and Lines	Session 87 - SC - Green & New Propellants (3)	Session 88 - ST - Engine Development										
ROOM	BRAMANTE 1	BRAMANTE 2	BRAMANTE 3	BRAMANTE 4	BRAMANTE 5	BRAMANTE 6	BRAMANTE 7	BRAMANTE 8										
Chairpersons																		
09:00	3125143 <b>Xenon Flow Controller Development</b> P. Smith, Moog Cheltenham, UK	3125072 <b>Advanced material &amp; manufacturing technologies applied to combustion chamber parts for next generation launcher</b> T. Sebald, Airbus Defence & Space, DE	3124850 <b>Cathode-less gridded ion thrusters for small satellites</b> A. Aanesland, LPP, CNRS-Ecole Polytechnique, FR	3124866 <b>Next generation plume modelling and its impact on S/C design</b> B. Zitouni, OHB, DE	3125060 <b>LNG mixing and combustion under supercritical conditions</b> P.E. Lapenna, University of Rome "La Sapienza", IT	3125021 <b>Trial Manufacturing and Evaluation of New Composite Propellant Tank for Satellite</b> K. Hatai, JAXA, JP	3124966 <b>Hypergolic green propellants based on the HTP for a future satellite platforms</b> W. Florczuk, Institute of Aviation, PL	3124726 <b>Development of LE-9 engine</b> H. Kawashima, JAXA, JP										
09:20	3125306 <b>Xenon tank for electric propulsion, needs and challenges</b> L. Velut, AIRBUS Defence and Space, FR	3125016 <b>TRL5 Development of cryogenic External Tank Insulation (ETI) for Launcher Application</b> W.P. Fischer, Airbus Safran Launchers, DE	3124914 <b>Design, Fabrication, Testing and Modeling of a Vaporizing Liquid Micropropulsion System</b> T. van Wees, Delft University of Technology, Faculty of Aerospace Engineering, NL	3124752 <b>Simulation of the Thruster-Spacecraft Interactions between the UWE-4 CubeSat and a NanoFEEP Thruster using SPIS</b> M. Tajmar, TU Dresden, DE	3125263 <b>Combustion Modeling Study for a GCH4/GOX single element combustion chamber : Steady State Simulation and Validations</b> Y. Daimon, Japan Aerospace Exploration Agency, JP	3124654 <b>The Evolution of a Family of Propellant Tanks Containing Propellant Management Devices</b> W. Tam, Orbital ATK, US	3125034 <b>ADN: Production, properties and future perspective</b> H.H. Stenmark, Skifs, Skarstind, Jahansson and Ek, EURENCO Bofors AB, SE	3125052 <b>Nitrous Oxide Ethanol Bi-propellant Rocket Engine &amp; Gas Generator Development and Testing</b> M. Grubelich, Sandia National Laboratories, US										
09:40	3125359 <b>Electronic Pressure and Flow Regulation equipment applied to electric and cold gas propulsion</b> L. Fallarini, Finmeccanica, IT	3125157 <b>Technological development of the Single Material Single Part Regenerative Combustion Chamber</b> D. Liuzzi, AVIO S.p.A., IT	3124931 <b>High thrust-over-power electric thruster</b> A. Fruchtmann, H.I.T. - Holon Institute of Technology, IL	3124968 <b>A 3D hybrid code to study electric thruster plumes</b> F. Cichocki, Universidad "Carlos III" de Madrid, ES	3124814 <b>Numerical Simulation of the Hot Gas Side Flow and Wall Heat Transfer in CH4/O2 Rocket Thrust Chambers</b> H. Riedmann, Airbus DS GmbH, DE	3124733 <b>LH2 Feed Line Evaporation Cooler</b> A. Isselhorst, Airbus DS, DE	3125295 <b>Investigations about TMTZ, a prospective future propellant</b> A. Dhenain, CNRS, FR	3124846 <b>Development of LE-5B-3 engine for H3 launch vehicle</b> N. Naoki, Japan, JP										
10:00	3124993 <b>EUCLID Micropropulsion Feed Assembly Pressure Stability Verification</b> M. Pessana, Thales Alenia Space Italia, IT	3124906 <b>Replacing Titanium for the manufacturing of demisable propellant tanks. Investigation of Al-Lithium and its welding optimization</b> R. Bellarosa, Airbus Defence and Space, UK	3125171 <b>Lifetime Testing of the mN-FEEP Thruster</b> A. Reissner, FOTEC, AT		3124995 <b>Development of an Analytical Laser Ignition Model</b> B. Mewes, Airbus Safran Launchers, DE	3125119 <b>Design and manufacturing of an overwrapped gas pressure tank</b> A. Mataloni, AVIO S.p.A., IT	3124842 <b>On the quest towards new "Green" ionic liquids to replace hydrazine-based propellants</b> C. Miró Sabaté, University of Lyon, FR											
10:20	3124773 <b>Overview of NASA Iodine Hall thruster propulsion system development</b> T. Smith, NASA Glenn Research Center, US	3124960 <b>Preparation of exo-tetrahydrotricyclopentadiene based high energy density fuels</b> Y. Cong, Dalian Institute of Chemical Physics, Chinese Academy of Sciences, CN	3124800 <b>Novel architecture for an ion-ion plasma thruster</b> D. Renaud, CNRS-ICARE, FR	3124717 <b>Aspects of providing the requirements of spacecraft resistance to electro physical space factors</b> E. Tvedokhlebova, Central Research Institute of Machine Building (TsNIMash), RU	3125126 <b>Unsteady Numerical Analysis of Spray Combustion for Coaxial Jet Burner Using Detailed Chemical Reaction Mechanism</b> M. Motoe, Japan Aerospace Exploration Agency, JP	3124782 <b>Development of propellant tank for hydrogen peroxide in launcher applications</b> L. Solli, Nammo Raufoss AS, NO	3124839 <b>An Overview of the German Gel Propulsion Technology Program</b> C. Kirchberger, German Aerospace Center (DLR), DE	20160129 <b>Additive Manufacturing a Liquid Hydrogen Rocket Engine</b> C. P. Jones, E. Roberts, M. B. Koelbl, C. Singer, NASA/MSFC, US										
10:40	COFFEE BREAK																	

	SPACECRAFT	SPACE TRANSPORTATION	GENERAL INTEREST													
Friday May 6th, 2016																
	Session 89 - EP Propellant Management (3)	Session 90 - ST - Advanced Processes and Manufacture	Session 91 - SC - AOCS/RCS	Session 92 - ST - Modelling	Session 93 - Modelling Chemical Propulsion (6)	Session 94 - ST - Testing (2)	Session 95 - Microgravity Propellant Modelling & Test (2)	Session 96 - Advanced Concepts								
ROOM	BRAMANTE 1	BRAMANTE 2	BRAMANTE 3	BRAMANTE 4	BRAMANTE 5	BRAMANTE 6	BRAMANTE 7	BRAMANTE 8								
Chairpersons																
11:10	3125138 Development of a Iodine Feeding System for Electric Propulsion F. Paganucci, University of Pisa, IT	3125375 New horizons for SMA (Shape Memory Alloy) in space propulsion applications O. Livne, RAFAEL, IL	3125140 Propulsion Module for GOCE 2 P. Smith, Moog Cheltenham, UK	3124805 Modelling of the cyclic and viscoplastic behavior of a copper-base alloy using Chaboche's model W. Bouajila, DLR Lampoldshausen, DE	3125155 Parametric Study of an Expander Bleed Engine Performance M. Leonardi, La Sapienza, IT			3124617 Elements of United Physics for Aerospace Propulsion, Radiative Medium Motion and Intellect Background with Experimental Confirmations M. Ivanov, Central Institute of Aviation Motors, RU								
11:30		3125185 Filament wound solid rocket motor vessels strain measurement and potential SHM monitoring through fiber optics G. Fabbi, AVIO S.p.A, IT	3124753 Cryosat-2 Propulsion System Model F. Di Matteo, ESA/ESTEC, NL	3124624 Thermal Model Recognition for Propellant Gauging on SpaceBus 4000 platform I. Antoine, Thales Alenia Space, FR	3125153 SUMO : An ESPSS extension for the surface evolution of propellant grains J. Hijikema, ONERA, FR	3125351 Experiments on water hammer induced by fast opening valve during priming: effect of gas desorption M. Lema, University of A Coruña, ES	3124909 Boiling Flow of Liquid Nitrogen in Complicated Channels under Low-gravity Condition T. Himeno, University of Tokyo, JP	3125172 Water ACS for Orbital Vehicle D. Fiot, AIRBUS DS - ASL, FR								
11:50		3124964 Synthesis of Twin Screw Process Demonstration Technology Activities For Solid Propulsion S. Saint Martin, Herakles (Safran), FR		3124821 Determination of the temperature and stress dependency of porous continuous fiber-reinforced composite materials permeability through experiment and simulation W. Bouajila, DLR Lampoldshausen, DE	3125156 ESPSS Model of a Simplified Combined-Cycle Engine for Supersonic Cruise J. Moral, EAI, ES	3124870 Laser-Induced Breakdown Spectroscopy of Gas Compositions for Equivalence Ratio Determination in Space Propulsion R. Stützer, German Aerospace Center, DE	3125323 Cryofenix (Cryogenic sounding rocket experiment) results S. Bianchi, Air Liquide Advanced Technologies, FR									
12:10		3125031 The biggest Carbon-Epoxy solid rocket motor case demonstrator ever made M. Forzan, Airbus DS, FR	3124932 Fluidic passivation system minimizing the force and torque on a satellite (example of CNES' Microscope mission) G. Boudier, CNES, FR	3124647 Numerical Investigation of Two Interacting Parallel Thruster-Plumes M. Grabe, DLR - German Aerospace Center, DE	3124979 Implementation and Evaluation of an unsteady friction model in the numerical simulation of water hammer C. Bombardieri, DLR, DE	3124712 Response of a reacting cryogenic oxygen jet to transverse acoustic forcing J. Hardi, DLR, DE	3124953 Simulation of the Ariane 5/ECA cryogenic upper-stage chill-down under microgravity conditions for the Demo-Flight missions using the thermal-hydraulic code COMETE D. Duri, Snecma - Groupe Safran, FR	3124618 LENR theory and application to aerospace power plant M. Ivanov, Central Institute of Aviation Motors, RU								
12:30			3125208 Stable Operation and Lateral Thrust Measurement of an Adjustably-designed Solid Micro-thruster for a Cubesat J. Asakawa, The University of Tokyo, JP		3124829 Extended gas generator cycle W. Kitsche, DLR, DE	3124880 An Investigation of Nitric Acid Hypergolicity with Lithium Aluminum Hydride and Paraffin Wax Fuels K. Stober, Stanford University, US	3124908 Numerical Prediction of Liquid Nitrogen Line Chill-down Processes by Direct Interface Tracking Approach Y. Umemura, JAXA, JP	3124772 Development of a Modular Propulsion Unit for Small Satellite Applications M. Poucet, Moog Inc., BE								
12:50	LUNCH															
14:30 17:30	TECHNICAL VISIT / AVIO S.P.A. Collefero															
18:30	END OF SPACE PROPULSION CONFERENCE															