

ESA Space Engineering & Technology Final Presentation Days (SET-FPDs) - 18th/19th June 2018:													
1 st Day: Monday, 18th June 2018													
08:30 – 10:00	Registration												
10:00 – 10:25	Technology Programmes Overview and Background on SET-FPDs												
10:25 – 10:40	Welcome to SET-FPDs from Franco Ongaro, Head of D/TEC and ESA/ESTEC												
10:40 – 11:00	20 mins Break - Sessions Set-Up												
Newton 1 ROOM	Session 1A - Chairman: Joachim Fuchs and Benoit Laine				Newton 2 ROOM	Session 1B - Chairman: Paolo Crosta				Einstein ROOM	Session 1C - Chairman: Dirk Thurnes		
11:00 - 11:15	Competence Domain 9 presentation (Digital Engineering for Space Missions) Speaker: Benoit Laine				11:00 - 11:10	Competence Domain 5 presentation (End-to-end RF and Optical systems and products for navigation, communications & remote sensing) speaker: Riccardo De Gaudenzi				11:00 - 11:15	Competence Domain 3 presentation (Avionic Architecture/DHS/OnBoard SW/ FDIR /GNC/end-to-end TT&C) Speaker: Dirk Thurnes		
11:15 - 11:45	Model-based requirements-verification lifecycle	Joachim Fuchs	Merlin Bieze, RHEA Group		11:10 - 11:35	Interference Mitigation by Signal Processing Cancelation & RF Front End	Francisco Amarillo	Francisco Amarillo Fernandez, ESA		11:15 - 11:45	Can-Bus Interface for TT&C	Carlos Urbina Ortega	Frans Thaller, SPDD System Techniek
11:45 - 12:15	Localisation of Objects in Space through rf Tags (LOST)	Luc Joudrier	Christophe Craeye,University Catholique de Louvain (UCL)		11:35 - 12:00	Integrity for navigation land users (INLU)	Rigas Ioannides	Ioana Gulie, Airbus		11:45 - 12:15	Mission On-Board Planning System	David Jameux	David Jameux, ESA
12:15 - 12:45	Earth Observation image librarian (EOLIB)	Michele Iapaolo	Mihai Datcu, DLR		12:00 - 12:25	Enhanced methodology and tools for system performance evaluation	Jose Vincente Perello Gisbert	Nabil Jardak, M3 Systems		12:15 - 12:45	Integrated Payload Computer for Modular New Space Applications	Dirk Thurnes	Samir Bouabdallah, Syderal
12:45 - 13:15	Data Mining for Analysis and exploitation of next generation of Time Series (DAMATS)	Michele Iapaolo	Adrian Stoica, Terrasigna		12:25 - 12:50	Advanced Payload Architecture for GNSS	Lionel Ries	Francis Soualle, Airbus DS GmbH		12:45 - 13:15	SpaceWire Network Bandwidth Performance Simulation Tool	David Jameux	Brice Dellandrea, Thales Alenia Space
13:15 - 14:10	Lunch Break + Poster Exhibition				13:15 - 14:10	Lunch Break + Poster Exhibition				13:15 - 14:10	Lunch Break + Poster Exhibition		
Newton 1 ROOM	Session 2A - Chairman: Peter van der Plas and Michele Iapaolo				Newton 2 ROOM	Session 2B - Chairman: Nikos Karafolas				Einstein ROOM	Session 2C - Chairman: Jean-Loup Terrailon		
14:10 - 14:40	Application of Virtual Reality for Mission Data Systems	Mehran Sarkarati	Ruediger Gad, Terma GmbH		14:10 - 14:40	Optical inter-satellite links for Galileo 2nd Generation -1	Nikolaos Karafolas	Philipp Biller, Tesat-Spacecom		14:10 - 14:40	SPI4SPACE study	Giorgio Magistrati	Daniele Roifo, ThalesAleniaSpace Italy
14:40 - 15:10	SOCICI - Science Operations Configuration Control Infrastructure	Vicente Navarro	Vicente Navarro, ESA		14:40 - 15:10	Optical inter-satellite links for Galileo 2nd Generation -2	Nikolaos Karafolas	Reto Muff, Thales Alenia Space		14:40 - 15:10	2nd Generation APS STR Breadboard Step 2: Optical Head	Emanuela Palombo	Peter Davidsen, Terma A/S
15:10 - 15:40	ESA Architecture Framework Upgrade	Christian Philippe	Todor Stoitsev, Telespacio Vega GMBH Germany		15:10 - 15:40	Multi GNSS Reference Station	Rui Sarnadas	Margaux Cabantous and Raphael Petrau, CapGemini FR		15:10 - 15:40	Miniaturized Star Tracker developed for CubeSats	Emanuela Palombo	Nurcan Alpay Koc, Innovative Solutions in Space
15:40 - 16:00	Coffee Break + Poster Exhibition				15:40 - 16:00	Coffee Break + Poster Exhibition				15:40 - 16:00	Coffee Break + Poster Exhibition		
Newton 1 ROOM	Session 3A - Chairman: Olivier Pin and Stéphane Lapensée				Newton 2 ROOM	Session 3B - Chairman: Nikos Karafolas				Einstein ROOM	Session 3C - Chairman: Jean-Loup Terrailon		
16:00 - 16:15	Competence Domain 2 presentation (Structures, Mechanisms, Materials, Thermal) Speaker: Olivier Pin				16:00 - 16:30	Micro-optoelectronic FGU	Eamonn Michael Murphy	Stefan Kundermann, CSEM		16:00 - 16:30	Generic AOCs/GNC techniques and design framework for Failure Detection Isolation and Recovery	Alvaro Martinez Barrio	Domenico Reggio, Airbus Defence and Space
16:15 - 16:45	Space based Optical Cryocooler development in Europe	Thierry Tirolien	Bauke Heeg, Lumium		16:30 - 17:00	Mm-wave mixers with low-barrier diodes	Petri Piironen	Matthias Hoeﬂe, ACST GmbH		16:30 - 17:00	Space 3-axis CVG Gyro Unit, Arietis-1	Steeve Kowaltschek	Alberto Torasso, Innalabs Ltd
16:45 - 17:15	Impact analysis of piston alignment on key compressor performance characteristics	Thierry Tirolien	Edward Jansen, Thales Cryogenics		17:00 - 17:30	Generic frequency converter unit for spaceborne lidar instruments	Claus Michael Jost	Myriam Raybaut , ONERA		17:00 - 17:30	Optimal guidance and control for flexible and manoeuvring spacecraft	Fabrice Boquet	Alexandre Falcoz, Airbus Defense and Space
17:15 - 17:45	Highly Efficient Stand Alone LHP based radiator system	Stephane Lapensée	Olivier Berder and Stephane van Oost, Euro Heat Pipes		17:30 - 18:00	Integrated Tile Demonstrator	Michael Ludwig	Grzegorz Adamiuk, Airbus		17:30 - 18:00	RDV and Docking 3D camera technology trade-off and BB demonstration	Steeve Kowaltschek	Peter Davidsen, Terma A/S
18:00 - 19:30	SET-FPDs Cocktail Reception (All Invited)												
2 nd Day: Tuesday, 19th June 2018													
Newton 1 ROOM	Session 4A - Chairman: Thomas Rohr				Newton 2 ROOM	Session 4B - Chairman: Marco Sabbadini				Einstein ROOM	Session 4C - Chairman: Jean-Loup Terrailon		
09:00 - 09:30	High Density Interconnect Technology and Thermount replacement with assembled devices	Jussi Hokka	Per-Erik Tegehall, Swerea IVF AB		09:00 - 09:30	Phaseless Near Field Measurements	Maurice Paquay	Olav Breinbjerg, TU Denmark		09:00 - 09:30	Navigation on a chip	Manuel Sanchez Gestido	Manuel Sanchez Gestido, ESA
09:30 - 10:00	Characterisation of Demisable Materials	Benoit Bonvoisin	Jim Merrifield, Fluid Gravity Engineering		09:30 - 10:00	Advanced low loss dual polarized slotted waveguide antenna	Maurice Paquay	Michael Notter, Airbus Defence And Space Ltd.		09:30 - 10:00	GNSS receiver for LEO/GEO/HEO applications (GAMIR-2) - EQM	Pietro Giordano	Franz Zangerl, RUAG Austria
10:00 - 10:30	Citric Acid as a Green Replacement for Steels Passivation	Advenit Makaya	Anthony Kent, ESR Technology		10:00 - 10:30	Competence Domain 4 presentation on Energy Storage (Electric Architecture/Power and energy/EMC) Speaker: Christopher Lyness				10:00 - 10:30	HEOP: GNSS HEO Navigation Preparation	Jose Antonio Garcia-Molina	Pedro Freire da Silva, Deimos Space
10:30 - 11:00	Electron Beam Welding for Safety Critical Space Applications	Andrew Norman	Chris Allen, TWI		10:30 - 11:00	Li-S Cells for Space Applications (LISSA)	Brandon Edward Buerger	Céline Barchasz, CEA and Delphine Mourembles, Airbus		10:30 - 11:00	MosaicNG Single-Frequency Multi Constellation GNSS Receiver Development	Rui Sarnadas	Michael Marx, Airbus Defence and Space
11:00 - 11:20	Coffee Break + Poster Exhibition				11:00 - 11:20	Coffee Break + Poster Exhibition				11:00 - 11:20	Coffee Break + Poster Exhibition		
Newton 1 ROOM	Session 5A - Chairman: Thomas Rohr				Newton 2 ROOM	Session 5B - Chairman: Keith Stephenson				Einstein ROOM	Session 5C - Chairman: Leopold Summerer		
11:20 - 11:50	Nano-enabled Fibre Reinforced Plastics for Space Applications	Laurent Pambaguian	Athanasios Baltopoulos, HTS		11:20 - 12:05	Competence Domain 4 presentation on Nuclear Power (Electric Architecture/Power and energy/EMC) Speaker: Keith Stephenson				11:20 - 11:35	Discovery & Preparation (GSP) presentation Speaker: Leopold Summerer		
11:50 - 12:20	Development of Space Fibre Metal Laminates (FML)	Benoit Bonvoisin	Jochem Frudiger, GTM Advanced Structures		12:05 - 12:35	Radioisotope Heater Unit Prototype Development	Keith Stephenson	Alessandra Barco and Emily Jane Watkinson, University of Leicester		11:35 - 12:05	Delay-Tolerant Networks for Earth Observation Satellites	Sebastian Martin	Jeremy Pierce Mayer, GMV Insyen
12:20 - 12:50	Surface Engineering for Parts Made by Additive Manufacturing	Johannes Gumpinger	Antti Vaajoki, VTT Technical Research Centre		12:35 - 13:05	Thermoelectric Converter for Small Scale RTG	Keith Stephenson	Alessandra Barco, Ramy Mesalam, and Emily Jane Watkinson, University of Leicester		12:05 - 12:35	Complex Constellation Management	Christian Schurig	Enrico Stoll, TU Braunschweig
13:05 - 14:00	Lunch Break + Poster Exhibition				13:05 - 14:00	Lunch Break + Poster Exhibition				12:35 - 13:05	Feasibility Study of Active Debris Mitigation for Mega Constellations	Robin Biesbroek	Carole Billot, TAS-I
Newton 1 ROOM	Session 6A - Chairman: Sven Erb				Newton 2 ROOM	Session 6B - Chairman: Laurent Marchand				Einstein ROOM	Session 6C - Chairman: Sergio Tabasco		
14:00 - 14:05	Competence Domain 7 presentation (Propulsion, space transportation and re-entry vehicles) Speaker: Samir Bennani				14:00 - 14:15	Competence Domain 1 presentation (EEE/Components/photronics/MEMS) Speaker: Laurent Marchand				14:00 - 14:15	PECS presentation Speaker: Sergio Tabasco		
14:05 - 14:30	Upper stage attitude control development framework (USACDF)	Jorgen Bru	Hans Strauch, Ariane Group		14:15 - 14:45	P-channel and N-channel CCD performance comparison	Alessandra Ciapponi	Ross Burgon, Open University		14:15 - 14:45	MagUltra - Novel Magnesium Composites for Ultralight Structural Components	Maite Trujillo / Laurent Pambaguian	František Šimančík, Institute of Materials and Machine Mechanics, Slovak Academy of Sciences (IMMAS)
14:30 - 14:55	On-board Real-time Trajectory Generation	Jorgen Bru	Carlo Alberto Pascucci, Embotech		14:45 - 15:15	Evaluation of micro-Lenses for Space Imagers	Mustapha Zahir	Xavier Rottenberg, IMEC		14:45 - 15:15	BIRD - Bismides for infrared photodetector applications	Maite Trujillo / Sarah Wittig	Arunas Krotkus, Centre for Physical Sciences and Technology (CPST)
14:55 - 15:20	Analytic Stochastic / Time Varying Mu Analysis for the VEGA GNC	Samir Bennani	Andres Marcos, University of Bristol		15:15 - 15:45	Large Aperature 2D MEMS Scanning Mirror for LISAR based miniaturized Rendezvous and Docking Sensor Unit	Nicolas Saillen	Vincent Kuenlin, Sercalo		15:15 - 15:45	Methodology for assessment of damage resistance properties of sandwich structures for European space sector	Maite Trujillo / Gianni Campoli	Kaspars Kalnins, Technical University of Riga
15:20 - 15:45	Simulation Tool for Rendezvous and Docking in High Elliptical Orbits with 3rd Body Perturbation	Massimo Casasco	Mario Innocenti, University of Pisa		15:45 - 16:00	Coffee Break				15:45 - 16:00	Coffee Break		
Newton 1 ROOM	Session 7A - Chairman: Sven Erb				Newton 2 ROOM	Session 7B - Chairman: Laurent Marchand				Einstein ROOM	Session 7C - Chairman: Sergio Tabasco		
16:00 - 16:20	Revlansys: Terminal Entry and Landing Mission System and Gnc Requirements for Re-Entry Vehicles	Celia Yabar	Alina Ionita, Deimos Space		16:00 - 16:30	RF MEMS switch technology for space application. Phase 1: Benchmarking and selection.	Nicolas Saillen	Jérémie Dhennin, ELEMCA		16:00 - 16:30	ICPE achievements in the field of steppers for space applications	Claudia Allegranza	Ioana Ionica, ICPE
16:20 - 16:40	Miniaturised Gridded Ion Engine breadboarding and testing for future Earth Observation missions	Eduard Bosch Borrás	Maria Smirnova, TransMIT		16:30 - 17:00	Evaluation of MCT APD detectors for future space applications	Sarah Wittig	Mark Herrington, Leonardo MW		16:30 - 17:00	CRYOFOAMS - Rigid Polyurethane Foams for Internal Tank Insulation for Launcher Upper Staoes	Maite Trujillo / Jan Persson	Uģis Cābulis, Latvian State Institute of Wood Chemistry
16:40 - 17:00	Coupling mechanisms of combustion and acoustics in rocket combustors	Marco De Rosa	Justin Hardi, DLR		17:00 - 17:30	Space evaluation of a 0.15µm PHEMT GaAs MMIC power technology (PPH15x-20) with BCB final protection	Jouni Latti	Lény Baczkowski , UMS		17:00 - 17:30	Added value of early adoption of CE approach throughout the project life cycle	Marta De Oliveira	Marta De Oliveira, ESA
17:00 - 17:30	Aerothermodynamic Tools for Hypersonic Inflatable Decelerators TRP Achievements	Luca Ferracina	John Underwood, Vorticity Ltd										
17:30 - 18:00	SET-FPDs Wrap-up session and SET-FPD future events												

AJ030	GSTP/TRP Meet&Greets
14:00 - 18:00	By Registration