**Tuesday 15th May 2018**

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| ***0900 – 1030*** | ***Introduction & Keynote Speakers*** |

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| ***1030-1100*** | ***Test & Verification (Short Papers)***<br>***Session Chair, Ron Logan, Glenair Inc.*** |
| (51) | Stuart Mills, Chris McClements, David Paterson, Pete Scott, Steve Parkes; TESTING OVER ETHERNET WITH THE SPACEWIRE GBE BRICK |
| (01) | Daniel DeLazari, Alexsander Deucher, Angela Santos, Armin Horn, Matthias Beer, Volker Ohlen; DEBUG AND VERIFICATION OF SPACEWIRE AND SPACEFIBRE LINK |

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| ***1130-1235*** | ***Missions & Applications (Long & Short Papers)***<br>***Session Chair, Stuart Mills, STAR-Dundee Ltd*** |
| (31) | Fredy Lange, Ran Ginosar, Peleg Aviely, Tsvika Israeli; IMAGING NOGAH SOFTWARE-DEFINED SYSTEM COMPRISING MANY RC64 PROCESSORS FOR OPTICAL AND SAR OBSERVATION SATELLITES |
| (59) | Susan Clancy, Matt Chase, Anusha Yarlagadda, Michael Starch, James Lux; SPACEWIRE AS A CUBE-SAT INSTRUMENT INTERFACE |
| (03) | Hans-Juergen Sedlmayr, Ralph Bayer, Alexander Beyer, Maximilian Maier, Nikolaus Seitz, Maxime Chalon, Wieland Bertleff, Werner Friedl, Thomas Obermeier; SPACEHAND: A MULTI-FINGERED ROBOTIC HAND FOR THE USE IN SPACE |

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| ***1350-1440*** | ***Components 1 (Long Papers)***<br>***Session Chair, Dirk Thurnes, ESA*** |
| (13) | Kevin Enouf, Stéphane Hermant; THE EVOLUTION OF SPACEWIRE ELECTRICAL INTERCONNECT |
| (45) | Nils-Johan Wessman, Jan Andersson; STATUS UPDATE ON NEW STANDARD PRODUCTS WITH SPACEWIRE SUPPORT |

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| ***1510-1600*** | ***Components 2 (Long Papers)***<br>***Session Chair, Jan Andersson, Cobham Gaisler AB*** |
| (56) | Albert Ferrer-Florit, Alberto Gonzalez Villafranca, Steve Parkes, Chris McClements; SPACEFIBRE INTERFACE AND ROUTING SWITCH IP CORES |
| (57) | Ronald T Logan; PHOTONIC TRANSCEIVERS FOR SPACEFIBRE DATALINKS |

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**Wednesday 16th May 2018**

***0900 - 1045*** ***Components (Short Papers)***
***Session Chair, Joseph R Marshall, BAE Systems***

(07) Daniel González, Jesús López, Adrien Frouin, Jürgen Beister, David Levaq; SPACE-QUALIFIED EUROPEAN LVDS COMPONENTS FOR SPACEWIRE NETWORKS

(19) Richard Johannes; COMPARATIVE PERFORMANCE OF VITA 78 CONNECTOR SYSTEMS FOR DAUGHTER CARD TO BACKPLANE APPLICATION

(20) Richard Johannes; MODULAR INTERCONNECT FOR POINT TO POINT AND BACKPLANE APPLICATION

(29) Marco Ruiz, Jean-Brieuc Feron; CONTROL LOOP PROCESSOR: A RELIABLE AND AGILE PROCESSING PLATFORM FOR MISSION CRITICAL APPLICATIONS

(47) Gil Baterina, Alan Senior; GALVANIC ISOLATION OF SPACEWIRE PORTS – AN INNOVATIVE DESIGN APPROACH

(22) Mikko Karppinen, Antti Tanskanen, Jyrki Ollila, Demetrio Lopez Molina, Juan Barbero, Cesar Boatella Polo, Richard Jansen, Iain McKenzie; RADIATION TOLERANT OPTICAL TRANSCEIVERS FOR SPACEFIBRE DATA LINK

(34) Hiroki Hihara, Mitsunobu Kuribayashi, Kyoko Murozono, Kazuyuki Yamada, Yu Otake, Kazutoshi Kobayashi, Yuto Tsukita, Haruki Marouka, Jun Furuta; PROGRAMMABLE SPACEFIBRE INTERFACE WITH NANOBRIDGE FIELD PROGRAMMABLE GATE ARRAY

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***1115 - 1215*** ***On-board Equipment & Software (Short Papers)***
***Session Chair, Hiroki Hihara, NEC Space Technologies Ltd***

(04) Toru Sasaki; SPACEWIRE AND SPACEFIBRE FOR INTERNAL ARCHITECTURE IN NVDRs

(12) Rolf Hartmann, Falk Ahlendorf, Olivier Ballereau, Pawel Buczek, Ingolf Steinbach; EFFICIENT PROCESSING OF HIGH THROUGHPUT SPACEWIRE DATA STREAMS FOR SPACE NAVIGATION

(14) Joseph Marshall; STANDARDIZED HIGH PERFORMANCE SPACEVPX MODULES LEVERAGE SPACEWIRE AS AN INTERNAL/EXTERNAL CONTROL FABRIC

(58) Susan Clancy, James Lux; ABSTRACTED SPACEWIRE INTERFACE FOR DEEP SPACE RADIO

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***1330 - 1500*** ***Networks & Protocols (Short Papers)***
***Session Chair, Charles Patrick Collier, SpaceVPX and SpaceVPXLite Working Group Chair***

(06) Thomas Bahls, Markus Bihler; USING SPACEWIRE TIMECODES FOR GLOBAL SYNCHRONIZATION OF PLL-BASED LOCAL CLOCKS

(09) Markus Bihler, Thomas Bahls, EFFICIENT IMPLEMENTATION OF ON-CHIP COMMUNICATION OPTIMIZED FOR SPACEWIRE NETWORKS

(35) Makoto Tomitaka, Yasushi Igarashi, Satoshi Ichikawa, Noriyasu Inaba, Atsushi Tomiki, Keiichi Matsuzaki, Ryouhei Kobayashi, Minoru Kumakiri, Iwao Fujishiro, Masaharu Nomachi; FEASIBILITY STUDY OF WIRELESS COMMUNICATION SYSTEM OPERATING ON SPACEWIRE NETWORK

(40) Sadatoshi Eguchi, Takeshi Takashima, Iku Shinohara; SPACEWIRE NETWORK SYSTEM FOR ERG MISSION NETWORK AND THE RESULT OF ITS PERFORMANCE

(16) Alessandro Leoni, Luca Fanucci, David Jameux; SIMULATOR FOR HIGH-SPEED NETWORKS (SHINE): AN OMNET++ SIMULATOR FOR SPACEFIBRE AND SPACEWIRE NETWORKS

(30) Felix Siegle; STANDARDISATION EFFORTS FOR A NETWORK MANAGEMENT AND DISCOVERY PROTOCOL FOR SPACEFIBRE

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**1515 – 1700 Poster Presentations**

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**Thursday 17th May 2018**

***0900 - 1015 On-board Equipment & Software (Long Papers)***
***Session Chair, Masaharu Nomachi, Osaka University***

(46) Erich Weih, Richard Wiest; SPACEFIBRE BASED MASS MEMORY – EXTREME RAPID MASS MEMORY UNIT (EXTRA MMU) ENABLED BY SPACEFIBRE

(54) Steve Parkes, Ashish Srivastava, Pete Scott, David Dillon, Albert Ferrer Florit, Alberto Gonzalez Villafranca; SPACEFIBRE CAMERA

(55) Steve Parkes, Pete Scott, David Dillon; SPACEVPX-RTG4 BOARD WITH SPACEWIRE OR SPACEFIBRE BACKPLANE

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***1045 - 1225 Networks & Protocols (Long Papers)***
***Session Chair, Jim Lux, Jet Propulsion Laboratory***

(36) Irina Lavrovskaya, Elena Suvorova, Alexey Khakhulin, Igor Orlovsky, Yuriy Sheynin, Ilya Korobkov, Valentin Olenev; REAL TIME VIDEO DATA TRANSMISSION IN SPACEFIBRE NETWORKS WITH THE ESDP TRANSPORT PROTOCOL

(37) David Jameux, Alessandro Leoni; ASSESSMENT OF SPACEFIBRE WITH RESPECT TO OSRA-NET REQUIREMENTS

(42) Charles Patrick Collier; A SWAPC SCALABLE HIGH PERFORMANCE HARDWARE STANDARD FOR 3U VPX BASED PROCESSING AND I/O SYSTEMS

(48) Krzysztof Romanowski, Wojciech Mich, Piotr Tyczka, Rafal Renk, Vangelis Kollias, Nikos Pogkas; EVALUATION AND INTEROPERABILITY TESTING OF THE SPACEWIRE-R PROTOCOL

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***1340 - 1430*** ***Test & Verification 1 (Long Papers)***
***Session Chair, Thomas Bahls, German Aerospace Centre (DLR)***

(15) Irina Lavrovskaya, Yuriy Sheynin, Valentin Olenev, Ilya Korobkov, Lev Kurbanov, Dmitry Dymov; COMPUTER-AIDED DESIGN SYSTEM FOR ONBOARD SPACEWIRE NETWORKS

(25) Ran Ginosar, Peleg Aviely, Roy Nesher, Zeev Meister, Tsvika Israeli, Dror Reznik; TESTING AND VALIDATION OF SPACEWIRE CONTROL AND DATA LINKS OF RC64

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***1500 - 1550*** ***Test & Verification 2 (Long Papers)***
***Session Chair, Irina Lavrovskaya, Saint-Petersburg State University of Aerospace Instrumentation***

(52) Stephen Mudie, David Gibson, Chris McClements, Stuart Mills, Steve Parkes; TESTING SPACEFIBRE EQUIPMENT AND SYSTEMS

(53) Stephen Mudie, David Gibson, Chris McClements, Stuart Mills, Steve Parkes; SPACEWIRE LINK ANALYSER MK3 AND SPACEWIRE RECORDER

***Poster Presentations***

(05) Thomas Bahls, Markus Bihler, Sergey Tarassenko; SPACEWIRE MEETS BIG DATA – REALTIME DATA MINING

(17) Ilya Korobkov; APPROACH TO INCREASE SPACEFIBRE LINK BANDWIDTH USAGE FOR STREAMING DATA TRANSFER

(24) Ran Ginosar, Tsvika Israeli, Gilad Danin, Moshe Goren, Peleg Aviely; WIDEBAND DVB-S2X FOR EOS DOWNLINK ON SPACEFIBRE-INTERCONNETED DUAL RC64

(33) Yi Xiaosu, Zeng Huasong, Zhang Chunxi; IMPLEMENTATION OF SPACEWIRE OPTICAL FIBER LINK FOR HIGH-SPEED AND LONG-DISTANCE DATA ACQUISITION

(39) Sadatoshi Eguchi, Takeshi Takashima, Iku Shinohara; DEVELOPMENT OF THE NEW MISSION DATA RECORDER (MDR) WITH SPACEWIRE INTERFACE ONBOARD THE ERG SPACECRAFT AND THE RESULT OF ITS PERFORMANCE ON ORBITS

(41) Yu Junhui, Niu Yuehua, Li Xiaojuan; COMMUNICATION PROTOCOL BASED ON TIME MULTIPLEXING FOR SPACEWIRE DATA HANDLING NETWORKS

(43) Charles Patrick Collier, Bill Ripley; SPACEVNX: A SCALABLE AND HIGHLY FLEXIBLE SMALL FORM FACTOR STANDARD FOR SMALL-SATS AND CUBESATS

(49) Tatiana Solokhina, Jaroslav Petrichkovich, Alexander Glushkov, Leonid Menshenin, Denis Kuznetsov, Steve Parkes, Dmitri Dymov; RADIATION TOLERANT MICROPROCESSOR FOR THE COMPUTER VISION WITH SPACEFIBRE LINKS

(50) David Poudereux, Juan Barbero, José Manual G. Tijero, Ignacio Esquivias, Iain Mackencie; OPTICAL SWITCHES WITH NO MOVING PARTS FOR SPACE APPLICATIONS

(60) Jih-Jong Wang, Nadia Rezzak, Stephen Varela, Ken O'Neill; SERDES SINGLE EVENT EFFECTS IN 65NM FLASH-BASED FPGA-RTG4