



PRELIMINARY PROGRAM

		DAY 1 (September 6 th)		
		Main Track	STINT Workshop	SSP Workshop
09:00	09:30	Keynote speech: Jasmine Grosinger		
09:30	10:30	WiSEE opening ceremony		
10:30	11:00	Coffee Break		
11:00	12:30	Technical Paper session: communication and navigation in extreme space and Moon	STINT Talks: State of Delay-Tolerant Networking	Invited Talks
		1063: Reaching High Sensitivity in Moon Transfer Orbit: the GNSS LuGRE Receiver <i>Simone Tedesco, Fabio Bernardi, Salvatore Guzzi, Matilde Boschiero, Matteo Pulliero, Davide Marcantonio, Mattia Ghedin, Efer Miotti, Samuele Fantinato, Oscar Pozzobon, (Qascom srl)</i>	Protocols and Procedures for the Solar System Internet" <i>Speaker: K. Scott (retired from Mitre Corporation)</i>	<i>D. Preble (Space Solar Power Institute) G. D. Durgin (Georgia Tech.)</i>
		1062: The Space Qualification Process of the LuGRE GNSS Payload <i>Matteo Pulliero, Giacomo Cittadin, Matilde Boschiero, Mattia Ghedin, Davide Marcantonio, Samuele Fantinato, Efer Miotti, Oscar Pozzobon, Qascom srl, Italy; Claudia Facchinetti, Mario Musmeci (ASI)</i>	The Asynchronous Network Management System <i>Speaker: S. Heiner (The Johns Hopkins University Applied Physics Laboratory)</i>	
		1033: A Customized EKF model for GNSS-based Navigation in the Harsh Space Environment <i>Oliviero Vouch, Andrea Nardin, Alex Minetto, Matteo Valvano, Simone Zocca, Fabio DAVIS, Politecnico di Torino, Italy</i>	On Routing Loops in Bundle Protocol <i>Speaker: S. Burleigh (IPNSIG)</i>	
			Routing in the Space Internet of Things <i>Speaker: J. Fraire (Inria/CONICET/Saarland University)</i>	
12:30	14:00	Lunch		
14:30	16:00	Technical paper session: modern design of space technologies	STINT Technical paper session 1	SSP: Technical paper session: novel techniques for space solar power
		1066: AN ADDITIVELY MANUFACTURED CPW-BACK-FED WIDEBAND CIRCULARLY-POLARIZED RADIX METASURFACE PATCH ANTENNA FOR X-BAND SPACE APPLICATIONS <i>John O'Keefe, Blake Roberts, Eduardo Rojas-Nastrucci, Embry-Riddle Aeronautical University, USA ; Bryce Gray, Kenneth Church, Sciperio Inc.,USA</i>	1075: SECURITY ON THE EDGE: THE ROLE OF AUTONOMY IN SECURING DTNS <i>Dr. Edward Birrane, Sarah Heiner, Johns Hopkins Applied Physics Laboratory, USA</i>	1010: Novel Beam Forming at 28 GHz with Simple Phased Array <i>Naoki Shinohara, Hiroyuki Kamada, Bo Yang, Wenyi Shao, Kyoto University, Japan</i>
		1076: MACHINE LEARNING ALGORITHM CO-DESIGN FOR A 40 NM RRAM ANALOG COMPUTE-IN-MEMORY ACCELERATOR <i>Ethan Weinstock, Yiming Tan, Wantong Li, Shimeng Yu, Georgia Institute of Technology, USA</i>	1031: UNIBO-BP: A NEW BUNDLE PROTOCOL IMPLEMENTATION <i>Carlo Caini, Lorenzo Persampieri, University of Bologna, Italy</i>	1011: Wireless and versatile Interface for Space and Harsh Environments <i>Marina Díaz Michelena, Alejandro Giménez, Miguel Ángel Rivero, Eduardo de Diego, David Salamanca, Alberto López, Alberto Aspás, Sergio Fernández Romero, María Parrondo, Pedro Tejedor, Instituto Nacional de Técnica Aeroespacial (INTA), Spain Claudio Aroca, Universidad Politécnica de Madrid, Spain</i>



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	1043: DATA-BASED MODELING OF MMS/FPI MICROCHANNEL PLATE DETECTOR RESISTANCE USING TEMPERATURE PROXY Joseph Patton,, Ali Abedi, Aurora Engineering/University of Maine, USA Alexander Barrie, Stewart Doe, Aurora Engineering/NASA GSFC, USA	1012: LUNAR COMMUNICATION SERVICES: FEASIBILITY STUDY ON TRAFFIC PRIORITIZATION OF QUASI-REAL TIME COMMUNICATIONS OVER DTNS Teresa Algarra Ulierte, Koojana Kuladinithi, Andreas Timm-Giel, Hamburg University of Technology, Germany; Felix Flentge, European Space Agency, Germany	1027:MM-WAVES WIRELESS POWER TRANSFER SYSTEM DEMONSTRATOR Marcel Joss, Christoph Zumbühl, Thomas Gisler, Frederik Imhof, Lucerne University of Applied Sciences and Arts, Switzerland; Matteo Madi, Sirin Orbital Systems AG, Switzerland	
			1028: PADDLESATS: ATTITUDE CONTROL AND STATION-KEEPING FOR ULTRA-LOW DENSITY SSP SATELLITES Vaibhav Bhosale, Jonathan Dolan, Grishma Kalepu, Deeksha Manjunath, Gregory Durgin, Georgia Institute of Technology, United States of America	
16:00	16:30	Coffee break		
16:30	17:30	Technical session: space-based monitoring applications	STINT Technical paper session 2	Tutorial session
		1018: High-temperature fully integrated wireless monitoring system for aerospace applications Ahmad HASSAN, Aref Trigui, Yvon Savaria, Polytechnique Montreal, Canada; Mohamad Sawan, Westlake University, China	1036: ANALYSIS OF BUNDLE PROTOCOL SECURITY POLICIES FOR SAFEGUARDING SPACE MISSIONS AGAINST THREATS Pablo Madoery, Carleton University Renato Cherini, Universidad Nacional de Córdoba Alessandro Cammarano, RDI Network Juan Grosso, RDI Network Jorge M Finochietto, Universidad Nacional de Córdoba - CONICET	Tutorial "An Introduction on Space Solar Power" Speaker: R. Zekavat (Worcester Polytechnic Institute)
		1029: STRUCTURE OF A INTERMEDIATE-FREQUENCY BASED IONOSPHERE SCINTILLATION MONITOR Yiming Wang, Kai Guo, Siqi Huang, Zhipeng Wang, Yanbo Zhu, Beihang University, China; Shujing Wang, School of Electronic Information Engineering, China	1040: Exploring A Cognitive Routing Strategy for Efficient Energy Management in Space DTNs Ricardo Lent, University of Houston, United States of America	
		1030: INVESTIGATION OF IONOSPHERIC SCINTILLATION EFFECTS ON RTK IN BRAZIL Honglin Tang, Kai Guo, Siqi Huang, Yanbo Zhu, Zhipeng Wang, Beihang University, China; Jichao Dong, Aviation Data Communication Corporation, China	1037: DTN DEMONSTRATIONS IN ESA GROUND SEGMENT Camillo Malnati, SpaceCube GmbH, Germany; Felix Flentge, ESA/ESOC, Germany	
18:00	(transfer to dinner by bus)			
19:30	GALA DINNER			



PRELIMINARY PROGRAM

DAY 2 (September 7 th)			
Main Track		STINT Workshop	SSP Workshop
09:00	09:30	Keynote speech: Harry Shaw (NASA) Opportunities and challenges for future interoperability and international cooperation in space communications	
09:30	10:30		Invited talk
			Disruptive innovation opportunities for funding research for In Space Solar Energy Harvesting for innovative space applications. Speaker: Speaker: Stela TKATCHOVA (EIC)
10:30	11:00	Coffee break	
11:00	12:30		STINT Technical Paper Session 3
			SSP Technical paper session 2: novel materials and devices for space solar power
		1019: On the Tractability of Yen's Algorithm and Contact Graph Modeling in Contact Graph Routing <i>Olivier De Jonckère, Technische Universität Dresden, Germany; Juan A. Fraire, CONICET - Universidad Nacional de Córdoba, Argentina; Scott Burleigh, D3TN, United States of America</i>	1069: PRELIMINARY STUDY OF AN IN-SPACE WIRELESS POWER TRANSMISSION FOR CUBESATS <i>A. Baris Gok, Diego Masotti, Alessandra Costanzo, University of Bologna, Italy</i>
		1020: Interregional Routing with Contact Passageways for Interplanetary Networks <i>Olivier De Jonckère, Technische Universität Dresden, Germany; Juan A. Fraire, CONICET - Universidad Nacional de Córdoba, Argentina</i>	1016: Analysis of Space Ambient Power in the Martian Environment <i>Kaitlyn Graves, Madeline Holda, Ryan Willsey, Ridwan Sadiq, Gregory Durgin, Georgia Institute of Technology, United States of America</i>
		1022: BUNDLE PROTOCOL VERSION 7 IMPLEMENTATION WITH CONFIGURABLE FAULTY NETWORK AND EVALUATION <i>Aidan Casey, Ethan Dickey, Jihun Hwang, Sachit Kothari, Raushan Pandey, Wenbo Xie, Purdue University, United States of America</i>	1021: MICROWAVE COMPONENTS IN CERAMIC 3D-PRINTING TECHNOLOGY FOR SPACE APPLICATION <i>Cristiano Tomassoni, Enrique López-Oliver, University of Perugia, Italy; Paolo Vallerotonda, Fabrizio Cacciamani, Luca Pelliccia, RF Microtech Srl, Italy</i>
12:30	14:00	Lunch	
		Technical paper session: Wireless communication and signal processing technologies for space (1)	STINT Panel: State of Delay-Tolerant Networking
14:30	16:00	1009: Cooperative Fault-Tolerant Reconfigurable Control of Heterogeneous Wireless and Networked Space Robotics and Satellite Systems <i>A. R. Mehrabian, K. Khorasani, Concordia University, Canada</i>	Invited: Model Simulation of a Space Solar Power System using Disaggregated Apertures of Transmission (DAGATs) <i>Alex Shroeder, et. al., Georgia Tech, United States of America</i>
		1041: Feedback on a fortification technique for exchanges of 802.15.4 data frames for real-time, critical data collection application	1067: Street of Coverage Constellation for Space Based Solar Power



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		Théophile - Élise Decaesteker, Antonio Freitas, Michel Misson, Clermont Auvergne University, France; Thomas Roméro, CNES, France		AMIT kumar BAGHEL, Henrique Chaves, IT AVEIRO, Portugal; Nuno Borges Carvalho, Pedro Pinho, Instituto de Telecomunicações, DETI, Portugal
		1035: COMPREHENSIVE GPR SIGNAL ANALYSIS VIA DESCRIPTIVE STATISTICS AND MACHINE LEARNING Himan Namdari, Majid Moradikia, Douglas Todd Petkie, Seyed Zekavat, Worcester Polytechnic Institute, United States of America; Radwin Askari, Michigan Technological University, United States of America		
16:00	16:30	Coffee break		
16:30	17:30	Technical paper session: Wireless communication and signal processing technologies for space (2)	Talks: Models in Space Systems: Integration, Operation and Networking (MISSION) - project workshop	
		1060: Testing a 1 Gbit/s Optical Wireless Communication System against Extreme Space Conditions Nicola Vincenti, Giulio Cossu, Lorenzo Gilli, Ezgi Ertunc, Ernesto Ciaramella, Scuola Superiore Sant'Anna, Italy Roberto Dell'Orso, Andrea Moggi, Maurizio Massa, Fabrizio Palla, Istituto nazionale di Fisica Nucleare, Italy	Polygon-Based Algorithms for N-Satellite Constellations Coverage Computing Speaker: Santiago Henn (CONICET)	
		1078: Leveraging Transformer and CNN for Monocular 3D Point Cloud Reconstruction AmirHossein Zamani, Amir G. Aghdam, Concordia University, Canada Kamran Ghaffari T., Traxara Robotics Inc., Canada	Towards Optimal Spacecraft Terminal Placement in Free Space Optical Satellite Networks Speaker: Juan Fraire (Inria/CONICET/SaarU)	
		1077: Adversarial Attacks on Resource Management in P2P Wireless Communications Ahmad Ghasemi, Majid Moradikia, Seyed Reza Zekavat, WPI, United States of America, Ehsan Zeraatkar, Shiraz Urban Railway Organization, United States of America	Three Approaches to Routing in Uncertain Delay-Tolerant Networks Compared Speaker: Arnd Hartmanns (Twente University)	
			Routing in LEO Satellite Constellations Speaker: Gregory Stock (SaarU)	



PRELIMINARY PROGRAM

		DAY 3 (September 8 th)	
		NTN6G workshop	GLUE workshop
09:00	09:30	Keynote speech: Vartan Piroumian " Digital Twins: Advancing Engineering in Space and Extreme Environments"	
09:30	10:30	Keynote	Tutorial
		The evolution of NTN from 5G to 5G-Advanced and the path to 6G" Speaker: A. Guidotti (CNIT)	Integrated Space-Aerial-Terrestrial Wireless Networks for Global Connectivity Speaker: Mustafa Kishk (Maynooth University), Mohamed-Slim Alouini (King Abdullah University)
10:30	11:00	Coffee break	
11:00	12:30	Panel session	Tutorial
		The road to unified 6G networks Moderator: K. Ntontin (SnT, University of Luxembourg) Munira Jaffar, GSOA Dorin Panaitopol, Thales Communications Security S.A.S. Thierry Berisot, NOVAMINT Benjamin Barth, DLR	Integrated Space-Aerial-Terrestrial Wireless Networks for Global Connectivity Speaker: Mustafa Kishk (Maynooth University), Mohamed-Slim Alouini (King Abdullah University)
12:30	14:00	Lunch	
14:30	16:00	Tutorial session	Tutorial session
		NB-IoT over NTN: Technology Overview, Challenges, and Potential Solutions Speaker: C. Amatetti, R. Campana (University of Bologna)	AI for Non-Terrestrial Networks Speaker: B. De Filippo, R. Campana (University of Bologna)
16:00	16:30	Coffee break	
16:30	17:30	Technical paper session	
		1008: On Enhancing Reliability in B5G NTN with Packet Duplication via Multi-Connectivity <i>Mikko Majamaa, Henrik Martikainen, Jani Puttonen, Magister Solutions, Finland; Timo Hämäläinen, University of Jyväskylä, Finland</i>	
		1032: Use of Rate Splitting in Multibeam Multicast NOMA Satellite Communication Systems <i>Sareh Majidi Ivani, Concordia university, Canada</i>	
		1013: In-Lab Performance Analysis of a 5G Non-Terrestrial Network using OpenAirInterface <i>Florian Völk, Robert Schwarz, Andreas Knopp, University of the Bundeswehr Munich, Germany</i>	
		1034: NTN: FROM 5G NR TO 6G Mohamad Sayed Hassan, Qualcomm FRANCE SARL, France; Chiranjib Saha, Ji Lianghai, Alberto Rico Alvarino, Jun Ma, Le Liu, Qiang Wu, Qualcomm Technologies, Inc, United States of America	