

**Monday 11 NOV 2019 Newton 2**

Session	P	Poster Session (Mon, 18:00 with Reception)	
57		Alticubes: a Ka-Band Cubesat Altimeter Constellation Concept	Y. Li
21		Parametric Analysis of a Dual-band Deployable Offset Reflector for CubeSats	A. Camps
61		WHEAT CLUTTER MODEL FOR GEOSYNCHRONOUS SAR MISSIONS	C. Convenevo
47		Laboratory, Field, and Modelling Studies in Support of G-CLASS (HydroTerra)	K. Morrison
77		Overview of the G-CLASS Hydroterra Mission Concept: a Geosynchronous Radar for Water Cycle Science	S. Hobbs
85		Orbit determination for Hydroterra mission. An interferometric approach	A. Broquetas
86		System Design for the G-CLASS Hydroterra Mission	S. Hobbs
87		The potential of frequent satellite observations to advance the science of solid earth	G. Wadge
12		Nadir Echo Suppression in Staggered SAR	M. Nogueira Peixoto
52		A polarimetric processor for GNSS reflectometry and its prospects for ocean altimetry and sea ice remote sensing	M. Hoseini
		Grazing angle altimetry results and future plans for Spire's growing Earth observation cubesat constellation	S. Esterhuizen
		BIBLOS PROJECT: STATUS AND SECOND STAGE SUMMARY	R. Kedzierawski

13:00	<b>REGISTRATION</b>		
<b>Session 0</b>	<b>WELCOME</b>		
14:00		Welcome Speech by Head of RF Payloads & Technology Div. (TEC-ET) in Directorate of Tech, Eng. & Quality	P. Angeletti
14:30		Welcome Speech by Head of ESA's Head of Campaign section (EOP-SMS) in Earth and Mission Sciences Division	M. Davidson
14:50		Logistics and Organisation	M. Ludwig C. Buck
<b>Session 1</b>	<b>Innovative Concepts and Applications</b>		
15:00	39	A Terrestrial Snow Mass Mission Pre-phase 0 Mission Concept	M. Cohen
15:20	46	NovaSAR-1 Payload – Successful development and operations of a low-cost SAR	M. Cohen
15:40	Coffee break		
16:10	5	DopSCA, simultaneous wind and Doppler retrieval with MetOp SG SCA	P. Hoogeboom
16:30	8	Ka-Band SCORE radar front-end	S. Gabrielli
16:50	6	Active Microwave Surface Air-Pressure Sensor (AMAPS)	E. Rumi
<b>Session 2</b>	<b>Specialised Instruments</b>		
17:10	81	SMOS: LATEST ADVANCES TOWARDS A FOLLOW-ON MISSION	A. Zurita
17:30	49	ULTRA-WIDEBAND SAR TOMOGRAPHY ON ASTEROIDS	O. Gassot
17:50	finish		

18:00 **Reception and Poster session: ESTEC**

**Tuesday 12 NOV 2019 Newton 2**

<b>Session 3</b>	<b>Geosynchronous SARs/Hydroterra (invited)</b>		
08:50	80	Assimilation of Sentinel-derived and GNSS-derived precipitable water vapour data to improve the WRF forecasts of extreme events occurred in the Mediterranean region: implications for the HydroTerra earth explorer idea	A. Parodi
09:10	72	Potential of G-CLASS/Hydroterra for the assessment of severe hydrological conditions	J. Calvet
09:30	79	Potential Capabilities of Geostationary SAR for monitoring Snow Parameters	T. Nagler
09:50	51	Hydroterra's Geosynchronous Image Product Simulation using Polarimetric Airborne SAR Data	V. Gracheva
10:10	78	Research progress on geosynchronous SAR system analysis and information processing in China	C. Hu
10:30	Coffee Break		
<b>Session 4</b>	<b>System Simulation and Modelling</b>		
11:00	41	Along-track formation of SAR minisatellites: analysis of the impact of realistic impairments on a new image formation algorithm using an end-to-end simulator	D. Mapelli
11:20	44	End-to-End performance simulator to support the Ka-band SAR applications consolidation and requirements definition.	S. Mancon
<b>Session 5</b>	<b>On-board Processing</b>		
11:40	19	Real-time Radio Frequency Interference Detection and Mitigation in GNSS & GNSS-R Receivers with the Front-End GNSS Interference eXcisor (FENIX)	A. Camps
12:00	29	A Cost-Benefit Analysis for Gapless Synthetic Aperture Radar Imaging	M. Younis
12:20	37	S4Pro: Prototype Implementation of Staggered SAR on-board Processing.	F. Queiroz de Almeida
12:40	14	Advanced Calibration for Active Antennas based on Digital Beam Forming for future space borne SAR missions	A. Moessinger
13:00	Lunch		
<b>Session 6</b>	<b>SAR Applications (invited)</b>		
14:00	23	MASKARA: Multiple Apertures for high resolution SAR based on KA band Reflectarray	D. Marote
14:20	74	Promising Techniques for Future Maritime Surveillance Demonstrated With DLR's Airborne Radar Sensors F-SAR and DBFSAR	S. Baumgartner
14:40	76	Analysis of applications of the ESA's future C-band high-resolution and wide-swath system: HRWS-Apps	M. Jose Sanjuan-Ferrer
<b>Session 7</b>	<b>Bi- and Multi-static Radar concepts</b>		
15:00	73	The Harmony mission: applications and preliminary performance	P. Lopez Dekker
15:20	82	Ocean Surface Current and Sea Ice Velocity Estimation Strategies and Preliminary Performances for the Harmony mission	M. Kleinherenbrink
15:40	Coffee break		
16:10	83	Processing, performance and preliminary end-to-end results of the Harmony mission for land applications	P. Prats-Iraola
16:30	84	An airborne bistatic SAR system in support for future mission development	K. Macedo
<b>Session 8</b>	<b>Systems and Sensors</b>		
16:50	27	ROSE-L EO System - Mission and Instrument performance assessment	M. Di Salvo
17:10	45	System and mission trade-offs for the Sentinel-1 Next Generation Phase-0 Study	M. Zonno
17:30	53	A Single-Pass Ka-Band Interferometric SAR for Earth surface dynamics: Concept, Applications and Challenges	L. Iannini
17:50	finish		

19:00 **Conference Dinner Koetshuis de Burcht Burgsteeg 13, LEIDEN**

**Tuesday 12 NOV 2019 Einstein**

<b>Session 9</b>	<b>GNSS-R (invited)</b>		
08:50	17	ON THE USE OF GNSS-R FOR BIOMASS STUDIES OVER TROPICAL FORESTS	H. Carreno-luengo
09:10	20	Preliminary Altimetric and Scatterometric Results with the Microwave Interferometric Reflectometer (MIR) during its first airborne experiment	A. Camps
09:30	43	Assessment of 2DVAR wind speed retrieval performances from CYGNSS GNSS Reflected signals	G. Grieco
<b>Session 10</b>	<b>Passive Instruments and Radiometers</b>		
09:50	54	ICI Instrument: Consolidation of the RF chain design and performance based on EQM results	A. Andres-Beivide
10:10	65	High Resolution Microwave Radiometer in AMR-C on Sentinel-6	P. Kangaslahti
10:30	Coffee Break		
<b>Session 11</b>	<b>Airborne Campaigns and Instrument</b>		
11:00	32	A new Hyper-Spectral Microwave Sounder (HYMS) instrument for future weather satellites	M. Henry
11:20	56	Development status of the interferometric Ka-band airborne SAR instrument - KaSAR	C. Trampuz
11:40	60	Status updates on the development of the OSCAR airborne SAR instrument	C. Trampuz
12:00	25	SWALIS/KARADOC project: an airplane experiment platform developed for physics measurement in Ka band. Application to SWOT and SKIM mission preparations.	S. Méric
<b>Session 12A</b>	<b>SmallSat/CubeSat (invited)</b>		
12:20	22	The Flexible Microwave Payload-2: A SDR-based GNSS-R Receiver and L-band Microwave Radiometer for CubeSats	A. Camps
12:40	34	The passive Reflectometer on Board of PRETTY	A. Dielacher
13:00	Lunch		
14:00	4	CYGNSS Constellation of GNSS-R SmallSats	C. Ruf
14:20	70	Cubesat Altimeters	C. Buck
14:40	64	Prelaunch Testing of the Radiometer Suite for the NASA TROPICS: Tropical Cyclone Mission	W. Blackwell
15:00	9	An overview on NASA's RF Instruments Technologies for Earth Observations	P. Ghuman
15:20	69	Enabling Global Observations of Cloud Ice Particle Size and Water Vapor Sounding in the Upper Troposphere and Lower Stratosphere: The Tropospheric Water and Cloud ICE (TWICE) 6U CubeSat Instrument	S. Reising
15:40	Coffee break		
<b>Session 12B</b>	<b>INVITED SESSIONS - SmallSat/CubeSat (cont.)</b>		
16:10	63	NASA's Earth Science Technology Validation through compact instruments on CubeSats and its impact in building future missions.	S. Babu
16:30	68	RAIN-CUBE: RESULTS FROM THE FIRST SPACEBORNE PROFILING RADAR ON A CUBESAT	O. SY
16:50	66	Global Observations from a Science-Quality Millimeter-wave Atmospheric Sounding Radiometer on a CubeSat: Temporal Experiment for Storms and Tropical Systems Demonstration (TEMPEST-D)	S. Reising
17:10	67	Definition of a Technology Validation Mission for P-band Reflectometry using Signals of Opportunity	J. Garrison
17:30	36	Development of High-Gain Deployable Reflectarray Antennas for Future CubeSat Applications	T. Rubeak
17:50	finish		

**Wednesday 13 NOV 2019 Newton 2**

<b>Session 13</b>	<b>Ka band Altimetry : on-going development and perspectives (invited)</b>		
08:50	40	Mission development of the Surface Water and Ocean Topography project for oceanography and hydrology	P. Vaze
09:10	13	Technical challenges and status of the Ka-Band Interferometric Radio-Frequency Unit for the SWOT mission	S. Ramongassie
09:30	16	Challenges in the Development of a Complex High-Power Ka-band Radar Interferometric Duplexer for the SWOT Mission	C. McLaren
09:50	15	Progress on Wide Swath Altimeter studies for operational high resolution monitoring of ocean and inland water	F. Demeestere
10:10	7	IRIS, an advanced radar altimeter suitable for cryosphere measurements	Y. Le Roy
10:30	Coffee Break		
11:00	24	SMASH: a Constellation of Small Altimetry Satellites Dedicated to Hydrology	D. Blumstein
11:20	59	The EE9 SKIM Mission	P. Lopez-Dekker
11:40	31	SKaR, the SKIM Ka-Band Radar for Doppler oceanography	E. Caubet
<b>Session 14</b>	<b>Multi-Channel SAR Techniques and Technologies (invited)</b>		
12:00	11	A Solution to Conflicting User Requirements Based on Simultaneous Single-/Dual- and Quad-Pol SAR Imaging	M. Villano
12:20	48	Multi-channel SAR technology developments for future space-borne SAR Systems	G. Adamiuk
12:40	35	Design and Demonstration of a Photonic SAR system	J. Marquez-Martinez
13:00	Lunch		
14:00	28	The ROSE-L Instrument - Architecture definition and technological advancement	M. Degiorgi
14:20	10	Blind Source Separation: A Novel Range Ambiguity Suppression Method in Multichannel SAR	E. Amin
14:40	75	Simulation of Multi-channel SAR Systems	M. Rodriguez-Cassola
<b>Session 15</b>	<b>On ground Validation and Calibration (invited)</b>		
15:00	26	Measuring scattering from Radar Absorbing Material from 50 to 750GHz	E. Saenz
15:20	38	On-ground radiometric calibration of the Ice Cloud Imager for Metop-SG	M. Bergada
15:40	Coffee break		
16:10	50	Optical Design and Electromagnetic Verification of the On-Ground Calibration Target for the Ice Cloud Imager on Metop-SG	A. Murk
16:30	58	MetOp SG MWI "On Ground Calibration Targets": design and development	P. Radaelli
16:50	71	Uncertainty Considerations in Antenna Pattern Calibration of Low Frequency Remote Sensing Instruments	L. Rolo
17:10	finish		