







→ MEASUREMENTS AND OBSERVATIONS IN THE 21st CENTURY CONFERENCE

PROGRAMME













21 November 2016 | ESA-ESRIN | Frascati, Rome (Italy)

PROGRAMME 21 November 2016

Time	Speaker	Title	Presentation		
9.00	Welcome ESA Director				
9.15	ESA – Jerome Benveniste	The ESA Earth Observation Programme for Hydrology			
9.30	Unitus – Flavia Tauro	Measurements and observations in hydrology in the 21st century			
9.40	WMO - Tommaso Abrate	WMO Global hydrometry support facility and Innovation hub			
9.50	IAHS - Christophe Cudennec	MOXXI in the historical perspective of the 95-year old IAHS			
Session 1: Soil Waters					
10.00	Salvatore Manfreda	Predicting root zone soil moisture with satellite near-surface moisture data in semiarid environment	Invited Oral		
10.20	Antoine Harfouche	Smart farms in the 21st century: Agriculture and intelligent systems	Invited Oral		
10.40	Antonino Maltese	Soil water content assessment by means of optical and thermal remote sensing: an analysis of advantages and limits of the "Triangle Method"	Oral		
10.55	Giovanni Ravazzani	Open hardware portable dual-probe heat-pulse sensor for measuring soil thermal properties and water content	Oral		
11.10	Laura Fois	Soil moisture derived from ASAR sensor in a Mulargia Basin: The influence of typical Mediterranean vegetation on the RADAR signal	Oral		
11.25	COFFEE BREAK				

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Session 2: Collaborative efforts						
11.50	Nick van de Giesen	Recent advances in the Trans-African Hydro-Meteorological Observatory	Invited Oral			
12.10	John Selker	Collaborative Open-Source Environmental Instrumentation	Invited Oral			
12.30	Maurizio Porfiri	Brooklyn Atlantis: Where aquatic robots and citizen scientists meet to monitor the environment	Invited Oral			
12.50	LUNCH BREAK					
14.10	Giacomo Galimberti	CITHYD: New possibilities in hydrological monitoring offered by experiences of Citizen Science for hydrometric measurements in ungauged basins	Oral			
Session 3: Altimetry						
14.25	Tommaso Moramarco	New perspectives for river discharge monitoring by leveraging ground and satellite observations	Invited Oral			
14.45	Jerome Benveniste	Assimilation of satellite altimetry data in hydrological models for improved inland surface water information: Case studies from the "Sentinel-3 Hydrologic Altimetry Processor prototypE" project (SHAPE)	Invited Oral			
15.05	Alessio Domeneghetti	River monitoring from the upcoming SWOT mission: altimetry measurements under different flow conditions	Flash			
15.15	Jerome Benveniste	Broadview Radar Altimetry Toolbox	Flash			
15.25	Jerome Benveniste	CRUCIAL: Cryosat-2 Success over Inland Water and Land: SAR and SARin Full Bit Rate Altimetric Heights and Validation	Flash			

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15.35	Jerome Benveniste	SAR altimetry processing on demand service for Cryosat-2 and Sentinel-3 at ESA G-POD	Flash			
15.45	COFFEE BREAK					
Session 4: New approaches						
16.00	Remko Uijlenhoet	Opportunistic sensing in Hydrology	Invited Oral			
16.20	Katrien van Eerdenbrugh	Temporal consistency assessment in rating curve data using Bidirectional Reach: an application on various measurement stations	Oral			
16.35	Ehsan Rabiei	Moving cars for rainfall estimation - laboratory and computer experiments	Invited Oral			
16.55	Chiara Corbari	A lysimeter laboratory experience for mass and energy fluxes measurements and hydrological models parameterization verification	Oral			
17.10	Matthew T Perks	Variability in flow state during a flash flood through process reconstruction using an Unmanned Aerial Vehicle (UAV)	Oral			
17.25	Giulia Buffi	The survey of Ridracoli Dam: UAV – Unmanned Aerial Vehicle – and traditional topographic techniques	Oral			
17.40	Bakhram Nurtaev	Observation and measurement of solar activity for study of climate change	Oral			
17.55	Carlo Gregoretti	Measuring and modeling runoff discharges at the feet of a rocky channel incised on the Dimai Peak (Venetian Dolomites, Northeast Italy)	Flash			
18.05	Jerome Benveniste	GOCE User Toolbox and Tutorial	Flash			
18.15	Salvatore Grimaldi	Images as a source of hydrological information: the case of river surface flow	Invited Oral			
18.35	Concluding Remarks					