

URSI-F 2010 Advanced Technical Program

(4-8 October 2010 – Firenze, Hotel Baglioni)

Monday Oct. 4	
Pre-registration	18:00 - at Hotel Baglioni

Tuesday Oct. 5	
REGISTRATION	08:00
WELCOME	08:30
	SMOS session (Chairs: Y. Kerr & M.Hallikainen)
1	09.00 – SMOS: Almost 1 year in orbit (Y. Kerr et al.)
2	09.20 - SMOS Cal/Val 2010 activities and RFI research with airborne HUT-2D radiometer (M. Hallikainen et al.)
3	09.40 - SMOS calibration and level 1 data assessment (I. Corbella et al.)
4	10.00 - Development of a forest emission model and first tests with SMOS signatures (R. Rahmoune et al.)
5	10.20 - Validation of SMOS measurements over the ocean (J.Boutin et al.)
BREAK	10:40-11.10
	SMOS & COSMO sessions (Chairs: M. Hallikainen & Y. Kerr)
6	11.10 - SMOS Soil Moisture Mapping in West Africa and its use in water studies (T. Pellarin et al.)
7	11.30 - Land use classification applied to Cosmo-Skymed (S. Mica and R. Ferrara)
8	11.50 - Signatures of atmospheric precipitation on atmospheric spaceborne synthetic aperture radar response (S. Mori et al.)
9	12.10 - A physical Optics-based polarimetric two scale model (A. Iodice et al.)
LUNCH	12:30-14:00
	SMAP session (Chairs: M. Moghaddam & L. Tsang)
1	14.00 - SMAP Radar Calibration Plans (R. West et al.)
2	14.20 - Analysis of coincidental microwave radiometer and Radar measurements: Experimental results applicable to SMAP Missions (A. Colliander and E. Njoku)
3	14.40 - Sensitivity of SMAP Radar retrieval of soil moisture to vegetation cover: Analysis and Field Verification (M. Moghaddam)
4	15.00 - Estimating bare surface soil moisture with L-band radar (J. Shi et al.)
5	15.20 - SMAP mission: radar vegetated surfaces data cubes with comparisons to field data (Xiaolan Xu et al.)
BREAK	15:40-16.00
	Sensors and Missions (Chairs: P. Snoeij & J. Shi)
6	16.00 - Development of the instrument simulator suite for atmospheric remote sensing: modeling scattering and propagation in the microwave range in support to upcoming NASA and ESA/JAXA missions (S. Tanelli et al)
7	16.20 - Scientific preparations for CoReH2O, an Earth Explorer candidate mission for Cold Regions hydrology (H. Rott et al.)
8	16.40 - GMES Sentinel-1 Calibration (P. Snoeij et al.)
9	17.00 - Wavemill: The Surface Current Instrument (C. Buck and C. Donlon)
END	17:20
RECEPTION	18:00 – At Palagio di Parte Guelfa (via Pellicceria) (http://eng.archinform.net/projekte/9976.htm)

Wednesday Oct. 6	
Keynote speech	08.30 – “Progress and challenges in microwave remote sensing of northern areas” by Martti Hallikainen
	Radar signatures of soil and vegetation (Chairs: P. Ferrazzoli & R. Lang)
1	09.00 - A model for backscattering from Quasi-periodic corn canopies at L-band (R. Lang et al.)
2	09.20 - Multi-Reaction and scattering from rough multilayers (P. Imperatore et al.)
3	09.40 - Application of the Tor Vergata scattering model to L band backscattering during the corn growth cycle (A. Joseph et al.)
4	10.00 - On the use of multi-temporal series of SAR data for soil moisture retrieval over agricultural sites (A. Balenzano et al.)
5	10.20 - Surface soil moisture estimation over agricultural semi-arid site using ASAR/ENVISAT radar data (M. Zribi)
BREAK	10:40-11.10
	Radar signatures of soil and vegetation (Chairs: R. Lang & P. Ferrazzoli)
6	11.10 - ASAR multi-incidence angle temporal backscattering signatures of Doñana marshes (B. Marti-Cardona et al.)
7	11.30 - Complementary LAI retrieval from SAR and optical remote sensing imager: calibrating SAR inversion based on optical products (P. Defourny et al.)
8	11.50 - Sensitivity study on the use of SAR soil moisture data on the MM5 forecast model precipitation fields (N. Pierdicca et al.)
9	12:10 – Evaluation of forest effect on the retrieval of snow parameters from backscattering measurements (G. Macelloni et al.)
10	12.30 - Polarimetric radar observation of vineyards at C-Band (Burini et al.)
LUNCH	12:50-14:00
	LAND and INSAR applications (Chairs: A. Monti Guarnieri & N. Pierdicca)
1	14.00 - Rotation-invariant built-up presence index for SAR data (P. Gamba et al.)
2	14.20 - Monitoring surface deformation using SqueeSAR™ (A. Ferretti et al.)
3	14.40 - The extended SBAS technique for generating long-term full resolution ERS/ENVISAT deformation time series (M. Bonano et al.)
4	15.00 - Getting the submillimeter: performance analysis of a Ground based radar (A. Monti Guarnieri et al.)
5	15.20 - Exploiting fully polarimetric RADARSAT2 images for retrieval of soil moisture in alpine grassland and pasture (L. Pasolli et al.)
BREAK	15:40-16.00
	LAND (Chairs: Son Nghiem & E. Santi)
6	16.00 - Combination of L and X band SAR data for estimating biomass and soil moisture of agricultural fields (S. Paloscia et al.)
7	16.20 - Emission model analysis of passive microwave signatures for river flow measurement using satellite radiometer data (Son Nghiem and G. Brokenridge)
8	16.40 - Monitoring flood events in Sundarban delta by microwave instruments (R. Chakraborty et al.)
9	17.00 - On the potential of AMSU-based soil wetness indices for soil moisture variations monitoring (T. Lacava et al.)
10	17.20 - Modelling of global-large scale natural microwave Earth radiation in decimeter wavelength scale (S. Golovachev et al.)
END	17.40
18:00-20:00	POSTER SESSION

Thursday Oct. 7	
Keynote speech	08.30 – “ <i>Electromagnetic models for active and passive microwave remote sensing</i> ” by Leung Tsang
	GNSS (Chairs: L. Guerriero & C. Buck)
1	09.00 - Simulations of the GNSS-R signal over land (L. Guerriero et al.)
2	09.20 - GNSS-R: a consolidated technique for Earth Observation (A. Egido and M. Caparrini)
3	09.40 - Bi-static GNSS reflections for monitoring sea ice and dry snow (F. Fabra et al.)
4	10.00 - Earth's surface characteristics from GPS reflected signals (Shuanggen Jin)
5	10.20 - GIANO: Galileo Interferometer Scatterometer and Observer (C. Pirazzi et al.)
BREAK	10:40-11.10
	GNSS/Ocean wind (Chairs: S. Zecchetto & A. Shibata)
6	11.10 - Study on correlation between airborne L-band radiometric measurements and GNSS-R observations at the Baltic Sea (J. Kainulainen et al.)
7	11.30 - High wind measurements from active and passive MW sensors (T. Meissner et al.)
8	11.50 - Wavelet technique to infer the wind direction from SAR images (S. Zecchetto and F. De Biaso)
9	12.10 - Ocean wind speed retrieval algorithm using 36V/H and 6H (Akira Shibata)
LUNCH	12:30-14:00
	Atmosphere (Chairs: A. Bosisio & C. Maetzler)
1	14.00 - Emission of supercooled clouds and dielectric models of water (C. Maetzler)
2	14.20 - Polarimetric measurements of precipitating clouds with the ADMIRARI multi-wavelength radiometer (A. Battaglia et al.)
3	14.40 - Ground based thermosounding of atmosphere: Retrieval procedure (A. Feijin et al.)
4	15.00 - A retrieval algorithm of atmospheric WV & cloud LW for AMSR-E (Masahiro Kazumori)
5	15.20 - Investigation of the spatial correlation of tropospheric constituents for the evaluation of a hypothetical deep-space site diversity system performance (C. Capsoni and L. Luini)
BREAK	15:40-16.00
	Atmosphere (Chairs: C. Maetzler & A. Bosisio)
6	16.00 - Complex for ground-based thermal sounding of atmosphere: setup description, results of first observation (A. Shvetsov et al.)
7	16.20 - Retrieval of the atmospheric specific attenuation coefficient through inversion of radiometric brightness temperature (A. Bosisio et al.)
8	16.40 - Microwave radar signatures of precipitation from S band to Ku band: application to GPM mission (C.V.Chandra)
9	17.00 - A new water vapor radiometer with minimized standing wave artifacts (G. Hochschild and J. Gross)
END	17:20
20:00	AWARD DINNER (Hotel Minerva, Piazza Santa Maria Novella) http://www.grandhotelminerva.com/index_eng.html

Friday Oct. 8	
	Planets (Chairs: C. Notarnicola & D. Riccio)
1	09.00 - The CASSINI mission: a scenario of innovative research (G. Franceschetti and D. Riccio)
2	09.20 - A numerical analysis to assess the use of a multifrequency spaceborne microwave radiometry for the observation of the moon sub-surface thermal properties (M. Montopoli et al.)
3	09.40 - Retrieval of wind speed on Titan lakes by using SAR and radiometric data (B. Ventura et al.)
4	10.00 - Sub-Surface Radar Sounding of the Jovian Icy Moons (L. Bruzzone et al.)
BREAK	10:20-10:50
	Criosphere (Chairs: G.Macelloni & S.Yueh)
6	10.50 - Dual-frequency polarimetric radar observations of snowpack (S. Yueh et al.)
7	11.10 - Passive radiometric measurements of the Polar Regions using tower-based, airborne, and spaceborne L-band instruments (Kimmo Rautiainen et al.)
8	11.30 - Active/passive snow retrieval algorithms based on dense media radiative transfer theory (Xiaolan Xu et al.)
9	11.50 - Can MHS data be used to improve snow water equivalent estimates? (C. Harlow)
10	12.10 - The retrieval of snow cover and snow water equivalent: Toward the operativeness (M.Brogioni et al.)
END	12:30

POSTERS	From Tuesday to Thursday – Poster Session on Wednesday Oct. 6 (18:00)
	Sensors & Missions
1	MEMS-Based Antenna Technology for millimeter and submillimeter wave remote imaging (F. Tripaldi et al.)
2	A synthetic aperture sonar focusing technique for interferometric applications (R. De Paulis et al.)
3	The EarthCARE Doppler radar: forward modelling and performance estimation (Battaglia et al.)
4	Investigation of Propagation Effects for SIGNAL (SAR for Ice, Glacier and Ocean global dynamics)(A.Danklmayer)
5	A RST-based analysis of AMSRE C-band Radio Frequency Interferences (T. Lacava et al.)
	Atmosphere & Ocean
6	A proposed criterion to filter out rainy sky thermal microwave emissions collected at the ground from a multi-channel radiometer (A.V. Bosisio et al.)
7	Calculated Astroclimatic Estimations of Atmosphere Absorption (N. Ruzhentsev and A. Mihailov)
8	Retrieval of Tropospheric Water Vapour Profiles by using spectra from a microwave spectro-radiometer at 22 GHz (R.Bleisch et al.)
9	Wind direction determination with Radarsat2 polarimetric images (S. Zecchetto et al.)
10	Development of a 22-GHz ground-based spectrometer for middle atmospheric water vapour monitoring (P.P. Bertagnolio et al.)
	COSMO-SkyMed/InSAR
11	Estimation of ship velocity by adaptive processing applied to Cosmo-SkyMed (R. Ferrara et al.)
12	Ship detection applied to COSMO-Skymed (R.Ferrara et al.)
13	Use of Cosmo-SkyMed data for calibration of hydrological models in semi-arid regions (G. Di Martino et al.)
14	Fractal analysis of SAR images for volcano monitoring: the case of Vesuvio (Di Martino et al.)
	Land
15	Global monitoring of soil moisture and vegetation biomass by using multi-frequency AMSR-E data (E.Santi et al.)
16	Temporal dynamics of large-scale radiation of land surface measured from satellites in L- and P- bands (S. Golovachev et al.)
17	Spatial dynamics of large-scale microwave radiation for main types of land surface in decimeter range of wavelengths (A. Mil'shin et al.)