Programme

Day 1, Monday 26 January 2009		
Opening Session		**Chair: Y.-L. Desnos/M. Engdahl**
09:00-09:10	Welcome	Mark Doherty (ESA)
09:10-09:30	POLinSAR Achievements and Plans	Yves-Louis Desnos (ESA)
09:30-09:40	Workshop Organisation	Marcus Engdahl (ESA)
Missions		**Chair: A. Moreira/E. Attema**
09:40-10:00	GMES Sentinel-1 Mission and Products	Evert Attema (ESA)
10:00-10:20	Tandem-L: Monitoring the Earth's Dynamics with InSAR and Pol-InSAR	Alberto Moreira (German Aerospace Center)
10:20-10:40	Estimation of Forest Sructure by means of Multi-BAseline Pol-InSAR	Konstantinos Papathanassiou (German Aerospace Centre (DLR))
10:40-11:00	DESDynI – A NASA Mission for Ecosystems, Solid Earth, and Cryosphere Science	Anthony Freeman (JPL/Caltech)
11:00-11:30	*COFFEE BREAK*	
Missions		**Chair: D. De Lisle/A. Coletta**
11:30-11:50	Mission Status and Data Availability: TANDEM-X	Irena Hajnsek (German Aerospace Center)
11:50-12:10	RADARSAT-2: Capabilities and Benefits for the Canadian Government	Daniel De Lisle (Canadian Space Agency)

12:10-12:30	Cosmo - Skymed	Alessandro Coletta (Italian Space Agency)
Missions		**Chair: D. De Lisle/A. Coletta**
12:30-12:50	ALOS/PALSAR and ALOS-2 program – JAXA's spaceborne L-band SAR programs	Masanobu Shimada (Japan Aerospace Exploration Agency)
12:50-13:10	Polarization Capabilities and Status of TERRASAR-X	Irena Hajnsek (German Aerospace Center)
13:10-13:50	*ROUND TABLE MISSIONS*	
13:50-15:00	*LUNCH*	
Calibration/Validation		**Chair: M. Shimada/A. Freeman**
15:00-15:20	Calibration of PalSAR polarimetric data	Anthony Freeman (JPL/Caltech)
15:20-15:40	Faraday Rotation Estimation from Unfocussed Raw data: Analysis using ALOS PALSAR Data	Marco Lavalle (University Tor Vergata)
15:40-16:00	PALSAR Polarimetric accuracy and stability evaluated for three years Amazon data	Masanobu Shimada (Japan Aerospace Exploration Agency)
16:00-16:20	Polarimetric PALSAR System Model Assessment and Calibration	Ridha Touzi (Canada Centre for Remote Sensing)
16:20-16:50	*COFFEE BREAK*	
Calibration/Validation		**Chair: M. Shimada/A. Freeman**
16:50-17:10	Data Quality Assessment of Polarimetric RADARSAT2	Ridha Touzi (Canada Centre for Remote Sensing)
17:10-17:30	Calibration of Dual Polarimetric C-BAND SAR data: a possible approach for SENTINEL-1	Marco Lavalle (University Tor Vergata)

17:30-18:00	*ROUND TABLE Calibration/Validation*	
18:00-19:30	*WELCOME DRINK*	
Day 2, Tuesday 27 January 2009		
Forests		**Chair: K. Papathanassiou/T. Ainsworth**
09:00-09:20	Boreal Forest Classification Employing Dual-pol PALSAR Imagery	Tom Ainsworth (Naval Research Lab)
09:20-09:40	Forest volume density estimation from ALOS PALSAR data in rugged region	Erxue Chen (Chinese Academy of Forestry) presented by Feilong Ling
09:40-10:00	PALSAR tropical forest cover mapping, mosaicing and validation, Case study Borneo	Dirk Hoekman (Wageningen University)
10:00-10:20	The Impact of Temporal Decorrelation Over Forest Terrain in Polarimetric SAR Interferometry	Seung-Kuk Lee (German Aerospace Center (DLR))
10:20-10:40	ENVISAT/ASAR VV/HH backscattering and the radiation characteristics of subarctic boreal forest	Terhikki Manninen (Finnish Meteorological Institute)
10:40-11:10	*COFFEE BREAK*	
Forests		**Chair: K. Papathanassiou/T. Ainsworth**
11:10-11:30	Progress on the first POLinSAR analysis of ALOS/PALSAR in the tropical forest of Indonesia.	Mahmud Raimadoya (Bogor Agricultural University (IPB))
11:30-11:50	Forest Height Estimation with X-band InSAR: Phase Centre Location versus RVoG	Kugler Florian (German Aerospace Centre (DLR))
11:50-12:30	*ROUND TABLE Forests*	
Pol-InSAR		**Chair: S. Cloude/P. Dubois-Fernandez**

12:30-12:50	A New Approach to Estimate Forest Parameters Using Dual-Baseline Pol-InSAR Data	Lu Bai (Institute of Electronics, CAS) presented by Fang Cao
12:50-13:10	Estimation of Ground Topography in Forested Terrain by Means of POLARIMETRIC SAR Interferometry	Koichi Iribe (DLR)
13:10-13:30	A New Approach for PolInSAR Forest Parameters Inversion: Results Using the ESA ALOS-PALSAR Prototype Processor	Marco Lavalle (University Tor Vergata)
13:30-13:50	Bandwidth Effects in POL-INSAR Forest Parameter Estimation Performance at P-Band	Seung-Kuk Lee (German Aerospace Center (DLR))
13:50-15:00	*LUNCH*	
Pol-InSAR		**Chair: S. Cloude/P. Dubois-Fernandez**
15:00-15:20	DTM Extraction Beneath Forest Canopy at L-Band from an Experimental Single-Pass Airborne Pol-InSAR System	Bryan Mercer (Intermap Technologies Corp.)
15:20-15:40	POLINSAR at Low Frequency and Ionospheric Effects	Pascale Dubois-Fernandez (ONERA)
15:40-16:00	Overview of the PolSARpro v4.0 Software	Eric Pottier (IETR UMR CNRS 6164)
16:00-16:40	*ROUND TABLE Pol-InSAR*	
16:40-17:10	*COFFEE BREAK*	
Urban Applications		**Chair: P. Lombardo/G. Trianni**
17:10-17:30	Performance Evaluation of Polarimetric SAR Interferometry in Urban Scenarios: Analysis of Simulated Images and Cross-correlation with Real Data.	Gerard Margarit (GMV A&D)
17:30-17:50	Urban Land-cover Mapping Using Multitemporal RADARSAT-2 Polarimetric SAR Data	Liang Gao (Royal Institute of Technology)
17:50-18:10	Building height estimation using multibaseline L-band SAR data and polarimetric subspace fitting methods	Yue Huang (IETR University Rennes 1)

18:10-18:30	3D Radargrammetric Modeling of Radarsat-2 Ultra-Fine and Polarimetric Modes	Thierry Toutin (Canada Centre for Remote Sensing)
18:30-19:00	*ROUND TABLE Urban Applications*	
Day 3, Wednesday 28 January 2009		
Compact/Hybrid Polarimetry		**Chair: K. Raney/A. Minchella**
09:00-09:20	Hybrid-Polarity SAR Architecture	R Keith Raney (Johns Hopkins University)
09:20-09:40	Compact versus full POLARIMETRIC SAR	Ridha Touzi (Canada Centre for Remote Sensing (CCRS))
09:40-10:00	Impact of Polarimetric Dimensionality on Forest Parameter Estimation by Means of Polarimetric SAR Interferometry	Jun Su Kim (German Aerospace Center)
10:00-10:20	Compact Polarimetric SAR Interferometry: PALSAR Observations and Associated Reconstruction Algorithms	Marco Lavalle (University Tor Vergata)
10:20-10:40	Compact Polarimetry: Multi-Thematic Evaluation	Francois Charbonneau (Canada Centre for Remote Sensing)
10:40-11:00	Comparison between the conformity coefficient and previous classification techniques for bare surface discrimination and application to compact polarimetry mode	My-Linh Truong-Loï (ONERA)
11:00-11:40	*ROUND TABLE Compact/Hybrid Polarimetry*	
11:40-12:00	*Coffee Break*	
Soil Moisture		**Chair: L. Ferro-Famil/F. Charbonneau**
12:00-12:20	Using Polarimetric and Dual-Pol RADARSAT-2 data for Soil Moisture Estimation	Francois Charbonneau (Canada Centre for Remote Sensing)
12:20-12:40	Soil moisture retrieval over periodic surfaces using PolSAR data	Sandrine Daniel (IETR Laboratory, UMR CNRS)

12:40-13:00	Soil Moisture Estimation under Vegetation applying Polarimetric Decomposition Techniques	Thomas Jagdhuber (German Aerospace Centre (DLR))
13:00-13:20	Using fully polarimetric SAR data for the retrieval of soil surface roughness: potentials and limitations for an operational use	P. Marzahn (Ludwig-Maximilian University of Munich)
13:20-13:50	*ROUND TABLE Soil Moisture*	
13:50-15:00	*LUNCH*	
Parallel Session: Cryosphere/Oceans		**Chair: D. Floricioiu/S. Lehner**
15:00-15:20	Evaluation of polarimetric configurations for glacier classification	Anthony P. Doulgeris (University of Tromsø) presented by Torbjørn Eltoft
15:20-15:40	Characteristics of snow and ice morphological features derived from multi-polarization TerraSAR-X data	Dana Floricioiu (DLR-IMF)
15:40-16:00	River Ice Mapping from TERRASAR-X Images	Stéphane Mermoz (IETR)
16:00-16:20	Characterisation of oriented volumes in glacier ice and extinction inversion with Pol-InSAR	Jayanti Sharma (DLR (German Aerospace Center))
16:20-16:50	*COFFEE BREAK*	
Parallel Session: Cryosphere/Oceans		**Chair: D. Floricioiu/S. Lehner**
16:50-17:10	Improved ocean wave measurement using dual-polarization SAR data !!	Susanne Lehner (German Aerospace Center, DLR)
17:10-17:30	Investigating Coastal Polynya Thin Sea Ice State in the Laptev Sea Using TerraSAR-X Dual-Pol Stripmap Data	Thomas Busche (German Aerospace Center (DLR) e.V.)
17:30-18:30	*ROUND TABLE Cryosphere/Oceans*	
Parallel Session: Agriculture/Wetlands		**Chair: R. Touzi /I. Hajnsek**

15:00-15:20	Crop Characterisation at Short Wavelength POLINSAR	Irena Hajnsek (German Aerospace Center)
15:20-15:40	Wetland InSAR over the Everglades from space observed polarimetric data	Sang-Hoon Hong (University of Miami)
15:40-16:00	Rice Monitoring in Spain by means of Time Series of TerraSAR-X Dual-pol Images	Juan M Lopez-Sanchez (University of Alicante) presented by J. David Ballester-Berman
16:00-16:20	Improvement of Vegetation Parameter Retrieval from Polarimetric SAR Interferometry using a Simple Polarimetric Scattering Model	Maxim Neumann (University of Rennes 1)
16:20-16:50	*COFFEE BREAK*	
Parallel Session: Agriculture/Wetlands		**Chair: R. Touzi /I. Hajnsek**
16:50-17:10	Use of Multi-temporal Polarimetric SAR Data for Crop Characterisation	Jai Singh Parihar (Indian Space Research Organisation)
17:10-17:30	Coastal wetland monitoring using multi-frequency polarimetric SAR	Sang-Eun Park (University of Rennes 1)
17:30-17:50	Coherent and Incoherent Scattering Decomposition in Terms of Roll Invariant Target Parameters : Applications to Wetland Classification Using C-Band SAR	Ridha Touzi (Canada Centre for Remote Sensing)
17:50-18:30	*ROUND TABLE Agriculture/Wetlands*	
Day 4, Thursday 29 January 2009		
POLSAR		**Chair: E. Pottier/W. Boerner**
09:00-09:20	Dual versus Quadpol: A New Test Statistic for Radar Polarimetry	Shane Cloude (AEL Consultants)
09:20-09:40	Polarimetric study of an anisotropic cloud of cylinders in a bistatic configuration	Elise Colin Koeniguer (ONERA)
09:40-10:00	Texture Analysis of Polarimetric SAR data	Gianfranco De Grandi (European Commission, DG Joint Research Centre) presented by Attilio Gambardella

10:00-10:20	A Joint Density of Temporal Scattering Elements: Application to Change Detection	Esra Erten (German Aerospace Center)
10:20-10:40	Evaluation and Bias Removal of Multi-Look Effect on Entropy/Alpha /Anisotropy	Jong-Sen Lee (Naval Research Laboratory)
10:40-11:00	Polarimetric Target Detector by the use of the Polarisation Fork	Armando Marino (The University of Edinburgh)
11:00-11:30	*COFFEE BREAK*	
POLSAR		Chair: E. Pottier/W. Boerner
11:30-11:50	A General Model-based Polarimetric Decomposition Scheme for Vegetated Areas	Maxim Neumann (University of Rennes 1)
11:50-12:10	Equivalence of Different Format Radar Polarimetric Data for Coherency Matrix Estimation	Riccardo Paladini (University of Pisa)
12:10-12:30	Dependence of Polarimetric Surface Scattering on Spatial Resolution	Sang-Eun Park (University of Rennes 1)
12:30-12:50	A Relaxed Wishart Model for Polarimetric SAR Data	Anfinsen Stian Normann (University of Tromsø)
12:50-13:10	Estimation of normalized coherency matrix through the SIRV model. Application to high resolution POLSAR data	Gabriel Vasile (GIPSA-lab, CNRS)
13:10-13:50	*ROUND TABLE POLSAR*	
13:50-15:00	*LUNCH*	
Tomography		Chair: F. Rocca/K. Papathanassiou
15:00-15:20	Experiments of 3D SAR Tomography Techniques with P-Band Polarimetric Data	Fabrizio Lombardini (University of Pisa)
15:20-15:40	Polarimetric Options for P-Band SAR Tomography of Forested Areas	Stefano Tebaldini (Politecnico di Milano)

15:40-16:00	Tandem-L Forest Parameter Performance Analysis	Francesco De Zan (DLR - German Aerospace Center)
16:00-16:20	P-Band SAR Tomography of the Remningstorp Forest Site	Stefano Tebaldini (Politecnico di Milano)
16:20-16:50	*COFFEE BREAK*	
16:50-17:30	*ROUND TABLE Tomography*	
17:30-19:30	FREE POSTER SESSION	
Poster Session - Agriculture/Wetlands		
Vegetation Parameter Extraction Using Dual Baseline PolinSAR Data		Hong Zhang (Center for Earth Observation & Digital Earth, CAS)
Agricultural performance monitoring with Polarimetric SAR and Optical Imagery		Tishampati Dhar (University of Adelaide)
Monitoring of maize damage caused by western corn rootworm by remote sensing		Gizella Nádor (Institute of Geodesy, Cartography and Remote Sensi)
SarVeillance, une approche multidate à l'aide de R2		Hardy Stephane (Viasat-Geotechnologies)
Crop classification in central Navarre (Spain) using polarimetric radar images		Arantzazu Larrañaga Urien (Trabajos Catastrales, S.A.)
Complementarity of 4 polarizations in C-band SAR imagery to estimate biophysical variables for crop monitoring		Emilie Bériaux (Université Catholique de Louvain)
Discrimination of different water layers with TerraSar X images in “La Albufera de Valencia, Spain”.		Pedro Miguelsanz (Tragsatec)
Near Real-Time Polarimetric C-Band SAR Observations of Vineyards: RADARSAT-2 watching the Italian Frascati wine area		Alessandro Burini (Geo-K)
Vegetation Identification and Change Detection with Radarsat-2 Polarimetric Imagery		Joseph Buckley (Royal Military College of Canada)

A space-based hydrological monitoring of wetlands using ALOS dual-pol SAR interferometry	Sang-Wan Kim (Sejong University)
Poster Session - Cal/Val	
An Approach to Determine the Maximum Acceptable Distortion Level in Polarimetric Calibration for Pol-InSAR Applications	Yongsheng Zhou (Inst of Electronics, Chinese Academy of Sciences) presented by Fang Cao
Poster Session - Cryosphere/Ocean	
Wind Field Retrieval over the Ocean Using X-Band polarization SAR Data	Yongzheng Ren (Ocean University of China)
Polarimetric Backscattering Behavior of River Ice Cover	Stéphane Mermoz (IETR)
Evaluation of TerraSAR-X for natural oil seep studies	Medhavy Thankappan (Geoscience Australia)
Fully Polarimetric SAR data for Oil Slick Observation	Ferdinando Nunziata (Università di Napoli Parthenope)
Fully Polarimetric Slick-free and Slick-covered Sea Surface Scattering	Attilio Gambardella (Università di Napoli Parthenope)
Results of the search for the multiyear sea ice objects for deployment of the North Pole drifting station 36 during the field campaign 2008 using ENVISAT WSM and GMM imagery	Vasily Smolyanitsky (Arctic and Antarctic Research Institute)
SAR Interferometry and Polarimetry for Mapping and Monitoring Permafrost in Canada	Brian Brisco (CCRS)
Investigation of Small Scale Polynya and Sea Ice Dynamics using TerraSAR-X Dual Polarisation Strip Map Mode Data	Thomas Krumpen (Alfred Wegener Institute (AWI))
Sea oil slick observation by means of fully-polarimetric ALOS PalSAR data	Mauricio Migliaccio (Università degli Studi di Napoli)
Poster Session - Forests	
Subarctic boreal forest albedo estimation using ENVISAT/ASAR and SPOT	Terhikki Manninen (Finnish Meteorological Institute)

The Dependence of the PolInSAR Degree of Coherence on Forest Parameters	Marco Lavalle (University Tor Vergata)
Complex-valued Neural Network Algorithms for Forest Parameters Retrieval and Classification from Polarimetric SAR Data	Emanuele Angiuli (University of Rome Tor Vergata)
Forest characterization and mapping using fully polarimetric SAR data	Mounira Ouarzeddine (USTHB)
X/C-HH InSAR and L-PolInSAR over Lodgepine Forest	M. Lorraine Tighe (Intermap Technologies)
Studies of phase center and extinction coefficient for boreal forest using X- and L-band polarimetric interferometry combined with LIDAR measurements	Jaan Praks (Helsinki University of Technology)
Tropical forest structure and its relationship with C band polarimetric Radarsat 2 data	Tatiana Kuplich (INPE)
Poster Session - Pol-InSAR	
Pol-In-SAR for GB-SAR and GPR	Motoyuki Sato (Tohoku University)
Poster Session - POLSAR	
Supervised classification using neural networks based on polarimetric time-frequency signature	Mickaël Duquenoy (ONERA)
Fully Automatic Land Cover Maps Generation Using Polarimetric SAR Data	Fabio Del Frate (Tor Vergata University)
Statistical Characterisation of the Maximum Eigenvalue of a Wishart Distribution with Application to Multi-Channel SAR System	Esra Erten (German Aerospace Center)
Multiscale analysis of SAR Polarimetric Correlations in the Eastern Pyrenees	Jose M. Redondo (Univ. Politecnica de Catalunya)
Identification of landcover using the modified four-component scattering power decomposition	Boularbah Souissi (USTHB)
Segmentation and Classification of Polarimetric SAR Data based on the KummerU Distribution	Olivier Harant (GIPSA-Lab)

Monitoring ecosystems in the Amazonian basin with ERS, ENVISAT and ALOS SAR data: Case studies in French Guyana and the Brazilian Jau basin	Pierre-Louis Frison (Université Paris-Est)
Quazi-scattering matrix registration in repeat pass mode	Ludmila Zakharova (IRE RAS)
Polarimetric Change Detection with RADARSAT-2	Ron Caves (MDA)
Phase Difference Application in Fully PolSAR Images	Natalia Rodionova (Institute of Radioengineering and Electronics)
Monitoring land use along ORBEL pipeline – Brazil	Paulina Setti Riedel (Sao Paulo State University-UNESP)
Saltpan Surface Variations Analysis With RADARSAT-2 Data	Daniela Marchionni (Instituto de Recursos Minerales (UNLP-CIC))
On the Influence of Surface Roughness on RADARSAT-2 Polarimetric Observations	Jesus Alvarez-Mozos (Public University of Navarre)
ALOS/PALSAR Unsupervised Polarimetric Classification using Complex Wishart Classifier	Masato Ohki (Japan Aerospace Exploration Agancy)
Advantages of ICA application on RADARSAT-2 data processing	Paola Ballatore (MARSec)
Poster Session - Tomography	
Minimal Slant Range Resolution for SAR Tomography of Forested Areas	Stefano Tebaldini (Politecnico di Milano)
Poster Session - Urban Applications	
Potential of ALOS PALSAR Imaging for Investigation of Archaeological Underground Marks	Nicole Dore (University of Rome)
Detect Urban Poverty Pockets with Ultra Fine Beam Images	Carlos Gustavo Cotlier (Universidad Nacional de Rosario)
Occlusion Boundaries Estimation From A High-Resolution SAR Image	Wenju He (Technische Universität Berlin)

Quad-pol Radarsat-2 images over man-made features		Dan Johan Weydahl (FFI)
Poster Session - Other		
A new online course on radar polarimetry and POLSAR image processing		Brigitte Leblon (Forestry, U. New Brunswick)
Precise Monitoring of Active Volcanoes using Space-borne L- and C-band Polarimetric SAR Systems		Wooil M. Moon (The University of Manitoba)
Land Deformation Assessment using Interferometric Techniques and Geophysic Methods in the Mount Cameroon.		Ngouanet Chrétien (National Institute of Cartography)
Poster Session - Missions		
ESA's Candidate Earth Explorer SAR Mission Concepts		Klaus Scipal (European Space Agency)
Day 5, Friday 30 January 2009		
09:00-09:20	*Invited Keynote Address : "Where do we go from here, and why should fully polarimetric RP-POLinSAR be further advanced towards reaching the limits of physical realizability"*	*Wolfgang-Martin Boerner (UIC-ECE Communications)*
09:20-09:30	*SESSION SUMMARY: MISSIONS*	
09:30-09:40	*SESSION SUMMARY: Calibration/Validation*	
09:40-09:50	*SESSION SUMMARY: FORESTS*	
09:50-10:00	*SESSION SUMMARY: Pol-InSAR*	
10:00-10:10	*SESSION SUMMARY: Urban Applications*	
10:10-10:20	*SESSION SUMMARY: Compact/Hybrid Polarimetry*	

10:20-10:30	*SESSION SUMMARY: Soil Moisture*	
10:30-10:40	*SESSION SUMMARY: Cryosphere*	
10:40-10:50	*SESSION SUMMARY: Agriculture/Wetlands*	
10:50-11:00	*SESSION SUMMARY: POLSAR*	
11:00-11:10	*SESSION SUMMARY: Tomography*	
11:10-11:20	GENERAL DISCUSSION	
11:20-11:50	*COFFEE BREAK*	
11:50-13:50	POLSARPRO TRAINING	
13:50-15:00	*LUNCH*	
15:00-17:00	POLSARPRO TRAINING	