PURDUE UNIVERSITY
SCHOOL OF CIVIL ENGINEERING
550 STADIUM MALL DRIVE, WEST LAFAYETTE, IN 47907
MOBILE: (+1) 765-300-1121 OFFICE: (+1) 765-496-1267 E-MAIL: PERISSIN@PURDUE.EDU
https://engineering.purdue.edu/~perissin/index.htm

DANIELE PERISSIN

INTRODUCTION

With an innate practical sense, Daniele Perissin received a strong education in approaching problems as engineer. By condensing in one point his main skills, he learned observing deeply the characteristics of a practical problem to find its solution. The fields in which he worked span from electronics to telecommunications and data processing, and he got a very high specialization on Remote Sensing and Synthetic Aperture Radar (SAR). During the academic experience he faced all aspects of research, starting from the theoretical formulation, data analysis, development of algorithms and software production, in cooperation with industrial companies. He wrote very complex codes to analyse and process remotely sensed data to monitor and to recognize radar targets. He is the author of the software SARPROZ, for processing SAR, InSAR, PSInSAR (and more) data. Before his PhD he got also skills in designing, assembling and repairing electronic equipments, maturing experiences in different Labs. He both worked in group and managed his own research alone. He supervised MSc and PhD students and coordinated researchers, creating and conducting work groups. After 4 years as post-doc in POLIMI, he spent 4 years as Research Assistant Professor in ISEIS, CUHK where he taught 2 courses and he led the InSAR group. Currently he is with the School of Civil Engineering at Purdue University, holding an Assistant Professor position in Geomatics.

WORK EXPERIENCE

2013 – to date Purdue University

Assistant Professor

- Faculty at Civil Engineering, Geomatics group. Working at mine detections in Indiana and applications of InSAR technology at transportation infrastructures in Indiana.
- Co-investigator of the project “Merging Satellite and Ground-Based Radar Remote Sensing for Monitoring Deformation of Urban Structures” funded by the GRF of Hong Kong, in collaboration with the Polytechnic University of Hong Kong
- Co-investigator of the project "Terrain and artificial basins deformation: monitoring perspectives with COSMO-SkyMed satellite", funded by the Italian Space Agency, in collaboration with La Sapienza University, Rome.
- Principal investigator of an InSAR study of the surface deformation in Los Angeles, ASTRIUM Infoterra providing 64 TerraSAR-X images of the city.
- Co-investigator of the project “Monitoring and mapping landslide areas in central and southern Taiwan before and after typhoons” in collaboration with the Department of Geomatics, National Cheng Kung University (Prof Hone-Jay Chu)
- Purdue representative at WINSAR (Western North America InSAR Consortium)
- Collaborator of Nhazca, Italian Spin-Off Company of University La Sapienza (Dr. Paolo Mazzanti) for landslides monitoring in Italy.
- Collaborator of Spatial Technology Ltd, Hong Kong (Mr Andy Cheung) for InSAR applications in Hong Kong.
- Developer of SARPROZ software, a processing tool for SAR, InSAR, PSInSAR, QPSInSAR (and more) analysis

  www.sarproz.com

2009 – 2013 Chinese University of Hong Kong (CUHK)

Research Assistant Professor

- Principal Investigator of the CUHK Direct Grant funded project "3D reconstruction and stability monitoring of the Three Gorges Dam with Cosmo SkyMed PSInSAR", February 2012. Budget: 38.000 HK$.
- Principal Investigator of the CUHK TBF project: "Smart Land and Architectural Surveillance System", October 2011. Budget: 249.000 HK$
- Principal Investigator of the Hong Kong RGC GRF project "InSAR multi-band analysis of atmospheric Water Vapor in HK", July 2011. Budget: 933.000 HK$
- Principal Investigator of the Hong Kong Highways Department project, "Research on the performance of Satellite Radar Remote Sensing Technology in Ground Settlement Monitoring", May 2011. Budget: 350.000 HK$.
- Principal Investigator of the CUHK Direct Grant funded project "Subsidence analysis and DEM estimation in China by means of repeated X band Cosmo SkyMed images", January 2011. Budget: 25.000 HK$.
- Principal Investigator of the CUHK Direct Grant funded project "Partially coherent targets analysis over Hong Kong using TerraSAR-X data", January 2010. Budget: 20.000 HK$.
- Principal Investigator of the Italian Space Agency project "Terrain Motion Monitoring in China with Cosmo". Budget: 150 Cosmo data for 1.500.000 HK$.
- Principal Investigator of the Infoterra –Beijing- project "L and X band surface deformation monitoring in the Tianjin area". Budget: 90.000 HK$ plus 40 TSX data for 400.000 HK$.
- Member of the SAR research group under the framework of the International Association of Geodesy Sub-Commission 4.4 and the IAG Consortium for Mine Subsidence Monitoring supported by ERSDAC Japan. Data for 60.000 HK$.
- Principal Investigator of the Eastdawn project "Urban subsidence study in Shanghai with Cosmo SkyMed data". Budget: 70 Cosmo data for 700.000 HK$.
- Co-Investigator of the RGC project "An integrated model for monitoring Qinghai-Tibet railway deformation based on DInSAR technology and GPS observations". Budget: 900.000 HK$.
- Collaborator of POLIMI, Milan (Prof Fabio Rocca and prof Claudio Prati) for the ESA Dragon 3 project.
- Collaborator of CC University, Taiwan (prof. Sin Mei Ng) for monitoring ground movements (tectonics, volcanic activity, urban subsidence) in North Taiwan.
- Collaborator of KAUST, Saudi Arabia, (prof. Sigurjon Jonsson) for InSAR analysis over Turkey for detecting long-wavelength motions.
- Collaborator of Petronass University, Malaysia (prof Nassir Matori) for offshore platform monitoring.
- Collaborator of Wuhan Univeristy (prof Liao Mingsheng) for InSAR analysis over the Three Gorges Dam.
- Leader of the InSAR group of ISEIS, CUHK.

2002 – 2009 Politecnico di Milano (Milan)

Assistant researcher

- Principal Investigator in the European and Chinese space agencies **ESA/NRSCC Dragon 2** cooperation project. Analyses are conducted for urban monitoring and Digital Elevation Maps retrieval with InSAR data in the test sites of Beijing, Wuhan, Badong, Zhangbei. Moreover, the Three Gorges Dam is studied by means of SAR data acquired by different orbits and geometries. The work is carried out together with Wuhan University, Prof. Li Deren being the Chinese PI. The work in Milan is funded by ESA. Completed.
- Mitigation of Electromagnetic Transmission errors induced by Atmospheric Water Vapor Effects (**ESA METAWAVE** project). The project is joined by many Italian teams (Polytechnic of Milan, Sapienza University in Rome, Polytechnic of Turin,

CETEMPS L'Aquila, Perugia University). The aim is to achieve an independent estimate of the delay caused but the highly variable water vapor concentration on the InSAR data. For this purpose, GPS networks, numerical weather models, radiometers, and other ground instruments are exploited to deeply analyze the water vapor behavior both in space and time. The project is funded by ESA. Completed.

- **Multi mission** (multi orbits, frequencies, view angles, polarizations) SAR data analysis exploiting natural corner reflectors. Different works have been carried out to study and to realize the combination of SAR data acquired under different conditions, by different sensors, from different orbits. The developed techniques allow to increase the number of coherent scatterers in a given area, to increase the temporal sampling rate and to increase the number of coherently processed data. The work has been funded by internal funds and by TeleRilevamento Europa, **TRE**, a POLIMI Spin-off Company. Completed.
- Development of new **multi-baseline** techniques for the generation of accurate Digital Elevation Models by means of interferometric SAR data. The need for extending the Permanent Scatterers (PS) technique to non-urban areas pushed toward the development of new algorithms to extract information also from partially coherent targets. Vegetated and mountainous areas have been fruitfully processed and reliable estimates of the terrain height have been obtained. The work has been funded by internal funds and by **TRE**. Completed.
- Multi orbit PS analysis over Shanghai in collaboration with Wuhan University, China (**ESA- DRAGON** Project Id 2567). Within the first edition of the ESA-NRSCC Dragon Project, different sites have been processed as Shanghai and Tianjin, and city growth level has been retrieved together with subsidence rate and with the recognition of the urban scattering typologies. For the first time, data acquired by satellite parallel tracks have been coherently analyzed to estimate ground motion and local topography. The project has been funded by ESA. Completed.
- Multi orbit PS analysis over New Orleans in collaboration with Canadian Space Agency -CSA- and ESA (**CSA DELTA** Project, ESA Cat-1 Project Id 4394). The obtained results in the field of coherent processing of data acquired under different geometries and view angles pushed toward the study of the New Orleans case, where Hurricane Katrina caused the damage of the river banks and the consequent city flooding. Radarsat and ESA data, provided by the respective space agencies, have been processed and average deformation rate pre-hurricane has been estimated. The project has been funded by internal funds. Completed.
- **Landslides analysis** in various municipalities around Bergamo (Italy), in collaboration with **TRE**. The developed techniques to process partially coherent targets have been applied to landslide and mine stability cases. The work has been conducted together with local geologist. The project has been funded by TRE and ordered by a local geological survey company, under protection of the regional government. Completed.
- **Calibration** of repeated SAR images by means of urban Permanent Scatterers, in collaboration with **ARESYS**, a POLIMI Spin-off Company. Urban Permanent Scatterers can provide a natural ensemble of very good and stable reflectors for the relative calibration of SAR images and for the absolute calibration of satellite antennas. The need for active transponders is in such a way overtaken and very effective calibration algorithms can be developed. The work has been funded by ARESYS. Completed.
- Coherent combination of ERS and Envisat data by means of Permanent Scatterers (**ESA COPEESAT** Project Id 1412). The slightly different carrier frequencies of ERS and Envisat ESA satellites needed the development of new algorithms for the coherent combination of data acquired by them. The study of the problem gave the occasion to discover many characteristics of urban SAR Permanent Scatterers and to produce algorithms for the analysis and recognition of their electromagnetic signature. The Project has been funded by ESA. Completed.

1996 - 2002
Electronic technician, network manager

- Installation, cabling, maintenance, programming of telephone exchanges.
- Installation, cabling, maintenance of PC networks in Windows and Unix environments.
- Assembling, repairing, programming of PCs.
- Design and assembling of electronic and electrical equipments.
- Audio amplification for concerts.

TEACHING

- Professor of "Radar Remote Sensing" at Purdue University, 2013-to date
- Professor of the courses "Microwave Remote Sensing" and "Earth System Science data and analysis", CUHK, 2009-2013.
- Guest Professor of State Key Laboratory of Information Engineering in Surveying, Mapping and Remote Sensing, Wuhan, China, 2008-2010.
- Assistant Professor in the courses of Signals Theory and Telecommunications, POLIMI, 2006-2009.
- Supervisor of Master's and PhD's Students, 2003-to date.
- Seminars and lessons:

Invited Seminar at Polytechnic of HK, Hong Kong	29 Dec 2014
Invited Talk at NISAR workshop, Reston VA	29 Oct 2014
Invited Seminar at Udine University, Italy	20 May 2014
Invited Seminar at LNEC, Lisbon, Portugal	18 June 2014
Invited Seminar at Purdue University, USA	29 April 2013
Invited Seminar at Shenzhen University, China	21 January 2013
Invited Seminar at NCC, Taiwan,	04 January 2013
Lessons at ESA course, Beijing, China,	15-19 October 2012
Course on SAR/InSAR, UTP University, Malaysia,	3-7 September 2012
Invited Seminar at Chiba University, Japan,	01 March 2012
Invited Seminar at SKLEC Shanghai, China,	20 February 2012
Course on SAR/InSAR, Highways Dept, Hong Kong,	January 2012
Invited Seminar at WHIGG, Wuhan, China,	21 November 2011
Invited Seminar at GNSS, Wuhan, China,	19 November 2011
Invited Seminar at LIESMARS, Wuhan, China,	18 November 2011
Invited Seminar at NCC, Taiwan,	15 November 2011
Invited Seminar at NTU, Taiwan,	14 November 2011
Invited Seminar at ERSDAC Japan,	28 October 2011
Invited Seminar at GRM CUHK,	28 March 2011
Invited Seminar at Tianjin Institute of Surveying and Mapping,	05 March 2011
Invited Seminar at AGRS Beijing,	02 March 2011
Invited Seminar at HITSZ, Shenzhen,	29 October 2010
Invited Seminar at EE Department, CUHK,	14 October 2010
Lessons at ESA course, Lanzhou, China,	6-11 September 2010
Invited Seminar at Southwest Jiatong Uni, Chengdu, China,	23 August 2010
Lessons at GUCAS course, Beijing, China,	21-25 June 2010
Invited Seminar at KAUST, Saudi Arabia,	11 May 2010
Invited Seminar at Central South Uni, Changsha, China,	12 April 2010
Lessons at InSAR training course, ISEIS, CUHK, Hong Kong,	26-29 March 2010
Invited Seminar at ISEIS, CUHK, Hong Kong, China,	13 November 2009
Invited Seminar at Wuhan University, Wuhan, China,	25 May 2009
Lessons at ESA course, Wuhan, China,	17 October 2008
Invited Seminar at ISEIS, CUHK, Hong Kong, China,	10 October 2008

Invited Seminar at IECAS University, Beijing, China,	8 October 2008
Invited Seminar at Wuhan University, China,	29 April 2008
Invited Seminar at Province of Bergamo, Italy,	19 November 2007
Lessons at PhD Course on Remote Sensing, POLIMI,	24 October 2007
Lessons at ESA Course on Remote Sensing, Lisbon, Portugal,	7 September 2007
Lessons at Remote Sensing Course, POLIMI,	26 June 2007
Lessons at ESA Course for Ministry of Defence, Rome ,	22 November 2006
Invited Seminar at Carlo Gavazzi Space, Milan,	16 June 2006
Lessons at Radar theory course, POLIMI,	15-16 May 2006
Invited Seminar at Region Lombardy, Milan,	14 February 2006
Invited Seminar at DLR, Oberpfaffenhofen, Germany,	7 February 2006

AWARDS

- 'Dragon Programme' award, assigned by the European Space Agency (ESA) and the National Remote Sensing Center of China (NRSCC) in appreciation and recognition of his outstanding contribution to the success and achievements of the second phase of the Dragon Programme, June 2012.
- JSTARS best paper award, assigned by IEEE Geoscience and Remote Sensing Society, for the paper "Time Series InSAR Applications over Urban Areas in China", July 2012.

TRAINING

2002 - 2006 Politecnico di Milano (Milan)

Ph.D. in Information Technology

- Major research project: "SAR super-resolution and characterization of urban targets". Thesis advisor: Prof. Fabio Rocca, Politecnico di Milano, Italy. Referee: Prof. R.F. Hanssen, Delft University of Technology, the Netherlands.
  Exploiting about one hundred repeated spaceborne SAR acquisitions at a relatively low resolution (~25m x 5m on the ground) the 3D position of Permanent Scatterers (PS) was estimated with sub-meter accuracy. Moreover, by analyzing scattering pattern and polarimetric response of the targets, their main radar characteristics were estimated and a system for automatic detection of 5 urban target typologies (resonating structures, mirrors, poles, dihedrals and trihedrals) was developed. The interpretation of millimetric deformations detected by the radar was then improved and the identification of multi-sensor targets allowed the combination of data acquired with different orbits, frequencies and polarizations, increasing the number of deformation measurements and the number of detected targets.
- Minor research project: "Reference systems in satellite geodesy". Thesis advisor: Prof. Riccardo Barzaghi, Politecnico di Milano, Italy.
- Attended Courses in: "Neural networks, fuzzy logic and genetic algorithms"; "Graph theory"; "Finite elements technique"; "Inverse problem theory" and "Signals recognition theory".

1996 - 2002 Politecnico di Milano (Milan)

Degree in telecommunication engineering

- Master's Thesis title: "Three-dimensional focusing of SAR data from geosynchronous satellite".

  The analyzed SAR system consists of a fixed ground-based receiver and a TV broadcasting satellite as illuminator. The synthetic aperture is obtained by means of the small daily motion of the geosynchronous satellite. A 3D focusing algorithm was developed and the capability to precisely locate a target in 3D space was studied.

1999 - 2000 Teknische Universitaet (Wien)

Erasmus project

- Laboratory experiences on: LC filters, digital signal processing, signal decoding, radio devices, stochastic processes, optoelectronic, oscillators, transistors, waveguides.

1991 - 1996 Italian scientific high school (Milan)

High school Degree

- Project activity: design and assembling of an FM radio transmitter with quartz oscillator.

MAIN PUBLICATIONS

PATENTS

- A. Ferretti, **D. Perissin**, C. Prati, F. Rocca, "Data acquisition method and system, use of dihedrals for data acquisition", Italian Patent No. MI2005A001912, March 2006.

BOOKS

- **D. Perissin**, "SAR Super-resolution and Characterization of Urban Targets", VDM Verlag Dr Mueller, September 2010, ISBN-10: 3639294173.

INTERNATIONAL JOURNALS (SCI-INDEXED)

- E. Pichelli, R. Ferretti, D. Cimini, **D. Perissin**, N. Pierdicca, F. Rocca, B. Rommen, "InSAR water vapor data assimilation into mesoscale model MM5: technique and a preliminary experiment", JSTARS, 2014 (In press)
- Q. Luo, **D. Perissin**, Y. Zhang, Y. Jia, "L- and X- band Multi-temporal InSAR Analysis of Tianjin" Remote Sensing, 2014 (in press)
- A. Rocca, P. Mazzanti, **D. Perissin**, F. Bozzano, "Detection of past slope activity in a desert area using multi-temporal DInSAR with ALOS PALSAR data", Italian Journal of Engineering Geology and the Environment, 2014 (In Press).
- O. Dogan, **D. Perissin,** "Detection of Multitransition Abrupt Changes in Multitemporal SAR Images", IEEE JSTARS, in press, January 2014.
- Q. Luo, **D. Perissin**, H. LIN, Y. Zhang, W. Wang, "Subsidence Monitoring of Tianjin Suburbs by TerraSAR-X Persistent Scatterer Interferometry", IEEE JSTARS, Vol. PP, Issue 99, July 2013.
- Y. Qin, **D. Perissin**, L. Lei, "Design and Experiments of Corner Reflectors for Urban Ground Deformation Monitoring in Hong Kong", International Journal of Antennas and Propagation, 2013. doi:10.1155/2013/191685.
- D. Cimini, N. Pierdicca, E. Pichelli, R. Ferretti, V. Mattioli, S. Bonafoni, M. Montopoli, **D. Perissin**, "On the accuracy of integrated water vapor observations and the potential for mitigating electromagnetic path delay error in InSAR", Atmos. Meas. Tech., 5, 1015-1030, doi:10.5194/amt-5-1015-2012, 2012.
- **D. Perissin**, Z. Wang, H. Lin, "Shanghai subway tunnels and highways monitoring through Cosmo-SkyMed Persistent Scatterers", ISPRS Journal of Photogrammetry and Remote Sensing, 2012.
- C. Shilai, **D. Perissin**, H. Lin, "Atmospheric delay analysis from GPS meteorology and InSAR APS", Journal of Atmospheric and Solar-Terrestrial Physics (JASTP), 2012.
- **D. Perissin** and T. Wang, "Repeat-pass SAR Interferometry with Partially Coherent Targets", IEEE Transactions on Geoscience and Remote Sensing, page(s): 271 - 280, Volume: 50 Issue: 1, Jan. 2012.
- **D. Perissin,** T. Wang, "Time Series InSAR Applications Over Urban Areas in China",

JSTARS, Volume: 4, Issue: 1, Pages: 92-100, 2011.

- T. Wang, **D. Perissin**, F. Rocca and M. Liao, "Three Gorges Dam Stability Monitoring with Time Series InSAR Analysis", Science in China Earth Sciences, 2010, doi: 10.1007/s11430-010-4101-1
- E. Pichelli, R. Ferretti, D. Cimini, **D. Perissin**, M. Montopoli, F.S. Marzano, N. Pierdicca, "Water vapour distribution at urban scale using highresolution numerical weather model and spaceborne SAR interferometric data", Nat. Hazards Earth Syst. Sci., 10, 121-132, 2010. (Impact factor 1)
- T. Wang, M. Liao, **D. Perissin**, "InSAR Coherence Decomposition Analysis", IEEE Geoscience and Remote Sensing letters, Vol. 7, Issue 1, Jan. 2010 Pages:156 - 160. (Impact factor 1.8)
- C. Prati, A. Ferretti, **D. Perissin**, "Recent Advances on Surface Ground Deformation Measurement by means of Repeated Spaceborne SAR Observations", Journal of Geodynamics, 2009. (Impact factor 1.7)
- **D. Perissin**, "Validation of the sub-metric accuracy of vertical positioning of PS's in C band", IEEE Geoscience and Remote Sensing letters, Vol. 5, No. 3, July 2008, Pages: 502 – 506. (Impact factor 1.8)
- **D. Perissin**, C. Prati, "Identifying urban SAR Permanent Scatterers for motion interpretation and multi-track data fusion", AIT Italian Journal of Remote Sensing, Vol. 40, 2008, Pages: 115-121.
- **D. Perissin**, A. Ferretti, "Urban target recognition by means of repeated spaceborne SAR images", IEEE Transactions on Geoscience and Remote Sensing, Volume 45, Issue 12, December 2007, Pages: 4043 - 4058. (Impact factor 3.2)
- **D. Perissin**, C. Prati, "Characterization of urban SAR Permanent Scatterers", AIT Italian Journal of Remote Sensing, Vol. 38, 2007, Pages 85-95.
- **D. Perissin**, C. Prati, M. Engdahl, Y.-L. Desnos, "Validating the SAR wave-number shift principle with ERS-Envisat PS coherent combination", IEEE Transactions on Geoscience and Remote Sensing, Volume 44, Issue 9, Sept. 2006 Pages: 2343 - 2351.
- **D. Perissin**, F. Rocca, "High accuracy urban DEM using Permanent Scatterers", IEEE Transactions on Geoscience and Remote Sensing, Volume 44, Issue 11, Nov. 2006 Pages: 3338 - 3347. (Impact factor 3.2)

PROCEEDINGS OF INTERNATIONAL CONFERENCES

- M. Lazecký, P. Rapant, **D. Perissin**, M. Bakon, "Deformations of highway over undermined Ostrava-Svinov area monitored by InSAR using limited set of SAR images", CENTERIS 2014, 15-17 Oct 2014, Troia, Portugal.
- M. Bakon, **D. Perissin**, M. Lazecký, J. Papco, "Infrastructure Non-Linear Deformation Monitoring Via Satellite Radar Interferometry", SARWatch Workshop, CENTERIS 2014, 15 - 17 Oct 2014, Troia, Portugal.
- M. Lazecký, **D. Perissin**, Z. Wang, L. Lei, Y. Qin, "Observing Dam's movements with spaceborne SAR interferometry", XII IAEG Congress - Engineering Geology for Society and Territory - Volume 5, 15-19 Sep 2014, Torino, 6 p. ISBN 978-3-319-09047-4.
- M. Bakon, **D. Perissin**, J. Papco, M. Lazecký, "Persistent Scatterer InSAR monitoring of Bratislava urban area", European Geosciences Union General Assembly 2014, Vienna (Austria), 27 Apr - 2 May 2014.
- A. N. Matori, A. S. A. Latip, I. S. H. Harahap, **D. Perissin**, "Deformation Monitoring of Offshore Platform Using the Persistent Scatterer Interferometry Technique", Applied Mechanics and Materials, Vol 567, Trans Tech pubs, pp 325-330, 2014.
- F. Bozzano, C. Esposito, S. Franchi, P. Mazzanti, **D. Perissin**, A. Rocca, E. Romano,

IAEG "Analysis of a subsidence process by integrating geological and hydrogeological modelling with satellite InSAR data", IAEG XII CONGRESS "Engineering Geology for Society and Territory", Torino, September 15-19, 2014 (In Press)

- A. Rocca, P. Mazzanti, F. Bozzano, **D. Perissin**, IAEG 2014 "Advanced characterization of a landslide-prone area by satellite A-DInSAR", IAEG XII CONGRESS "Engineering Geology for Society and Territory", Torino, September 15-19, 2014 (In Press)
- M. Lazecky, **D. Perissin**, L. Lei, Y. Qin, M. Scaioni "Plover Cove Dam Monitoring with Spaceborne InSAR Technique in Hong Kong", JISDM, Nottingham, 9th September 2013.
- F. Bozzano, C. Esposito, S. Franchi, P. Mazzanti, **D. Perissin**, A. Rocca, E. Romano, "Analysis of a subsidence process by integrating geological and hydrogeological modeling with satellite InSAR data", ESA Living Planet Symposium, Edinburgh, United Kingdom, September 2013.
- P. Mazzanti, A. Rocca, **D. Perissin**, F. Bozzano, "Landslides investigated by A-DInSAR methods: from the feasibility analysis to detailed dynamics characterization", ESA Living Planet Symposium, Edinburgh, United Kingdom, September 2013.
- Y. Qin, **D. Perissin**, L. Lei, "InSAR multi-band analysis of atmospheric water vapour in Hong Kong", IGARSS 2013, Melbourne, Australia, July 2013.
- L. Lei, **D. Perissin**, Y. Qin, "Change detection with spaceborne InSAR techniques in Hong Kong", IGARSS 2013, Melbourne, Australia, July 2013.
- S.M. Ng, **D. Perissin**, Y.F. Wang "The Activity of the Tatun Volcanic Groups in Taiwan Revealed by Dual Techniques of Radar Interferometry", AOGS2013, Brisbane, Australia, June 2013.
- A. Rocca, **D. Perissin**, P. Mazzanti, F. Bozzano, "Monitoring ground instability in wide areas and single-building cases by means of satellite A-DInSAR", HKIE 2013, Hong Kong, May 2013.
- Y. Qin, **D. Perissin**, L. Lei, "An evaluation of the Performance in Ground Settlement Monitoring in Hong Kong using Satellite Radar Remote Sensing Technology", ISRSE 2013, Beijing, April 2013.
- L. Ling, **D. Perissin**, Y. Qin, "Atmospheric Phase Screen Estimation with TerraSAR-X Data in Hong Kong", ISRSE 2013, Beijing, April 2013.
- A. Rocca, P. Mazzanti, **D. Perissin**, P. De Pari, "Assessing the effectiveness of A-DInSAR for the analyses of a high density landslides basin", Rend. Online Soc. Geol. It., Naples, Italy, February 2013.
- **D. Perissin**, Z. Wang, C. Prati, F. Rocca, "Terrain monitoring in China via PS-QPS InSAR: Tibet and the Three Gorges Dam" ESA Dragon Special Publication, 2012.
- Q. LUO, **D. Perissin**, O. Dogan, H. LIN, "Tianjin Suburbs PS-QPS Analysis and Validation with Leveling Data", Proc. of IGARSS 2012, Munich, Germany.
- T. Balz, L. Wei, K. Liu, M. Liao, **D. Perissin**, "TomoSAR and PS-InSAR analysis of high-rise buildings in Berlin", Proc. of IGARSS 2012, Munich, Germany.
- **D. Perissin**, Y. Qin, M. Pang, Z. Wang "Research on the Performance of Satellite Radar Remote Sensing Technology in Ground Settlement Monitoring ", Proc. of IGARSS 2012, Munich, Germany.
- Z. Wang, **D. Perissin**, "Cosmo Skymed AO projects – 3D Reconstruction and Stability Monitoring of the Three Gorges Dam", Proc. of IGARSS 2012, Munich, Germany.
- **D. Perissin**, F. Rocca, N. Pierdicca, E. Pichelli, D. Cimini, G. Venuti, B. Rommen, "Mitigation of atmospheric delay in InSAR: the ESA METAWAVE project", Proc. of

IGARSS 2011, Vancouver, Canada.

- N. Pierdicca, F. Rocca, P. Basili, S. Bonafoni, D. Cimini, P. Ciotti, R. Ferretti, F.S. Marzano, V. Mattioli, M. Montopoli, R. Notarpietro, **D. Perissin**, E. Pichelli, B. Rommen, G. Venuti, "synergic use of EO, NWP and ground based measurements for the mitigation of vapour artefacts in SAR interferometry", Proc. of IGARSS 2011, Vancouver, Canada.
- Q. Li, **D. Perissin**, Q. Luo, H. Lin, and M. Pang, High Resolution SAR Change Detection in Hong Kong, Proc. of IGARSS 2011, Vancouver, Canada.
- Q. Luo, **D. Perissin**, H. Lin, and R. Duering, "Tianjin InSAR time series analysis with L and X-band", Proc. of IGARSS 2011, Vancouver, Canada.
- S. Cheng, **D. Perissin**, F. Chen, H. Lin, "Atmospheric Delay Analysis from GPS and InSAR", Proc. of IGARSS 2011, Vancouver, Canada.
- Z. Wang, **D. Perissin**, H. Lin, "Subway Tunnels Identification through Cosmo-SkyMed PSInSAR Analysis in Shanghai", Proc. of IGARSS 2011, Vancouver, Canada.
- N. Pierdicca, F. Rocca, D. Perissin, R. Ferretti, E. Pichelli, B. Rommen, D. Cimini, "Numerical weather prediction models and SAR interferometry: synergic use for meteorological and INSAR applications", Proc. of SPIE 2011, Vol 8179.
- N. Pierdicca, F. Rocca, B. Rommen, P. Basili, S. Bonafoni, D. Cimini, P. Ciotti, R. Ferretti, F.S. Marzano, V. Mattioli, M. Montopoli, R. Notarpietro, **D. Perissin**, E. Pichelli, G. Venuti, "Synergic Use of EO, NWP and Ground Based Data for the Characterisation of Water Vapour Field", Proc. of EUCAP 2011, Rome, Italy.
- Q. Luo, **D. Perissin**, H. Lin, and R. Duering, "Railway Subsidence Monitoring by High Resolution INSAR Time Series Analysis in Tianjin", Proc. of CPGIS 2011, Shanghai, China
- **D. Perissin**, Z. Wang, T. Wang, "The SARPROZ InSAR tool for urban subsidence/manmade structure stability monitoring in China", Proc. of ISRSE 2011, Sidney, Australia, 10-15 April 2011.
- M. Montopoli, F.S. Marzano, E. Pichelli, D. Cimini, R. Ferretti, S. Bonafoni, **D. Perissin**, F. Rocca, N. Pierdicca, "Water vapor integration methods to improve the quality of Synthetic Aperture Radar observations", Proc. ERAD 2010, 6th European Conf. on Radar in Meteorology and Hydrology: Adv. in Radar Technology, Sibiu, Romania, 6-10 Sept 2010.
- G. Gatti, **D. Perissin**, T. Wang, F. Rocca, "DEM retrieval and ground motion monitoring in China", ESA Dragon Special Publication, 2010.
- T. Wang, M. Liao, J. Tang, **D. Perissin**, F. Rocca, A. Rucci, "Landslides monitoring over the three gorges region with C- and X-band InSAR data", ESA Dragon Special Publication, 2010.
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REVIEWER EXPERIENCE

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- IEEE Geoscience and Remote Sensing Letters
- IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing
- International Journal of Remote Sensing
- Journal of Applied Remote Sensing
- Journal of Geodesy
- Geophysical Journal International
- Remote Sensing of Environment
- Photogrammetric Engineering & Remote Sensing
- Acta Astronautica
- Computers & Geosciences
- Italian Journal of Remote Sensing

LANGUAGES

- Italian (native), English (very good, spoken and written), German (good, spoken and written).

PROGRAMMING LANGUAGES

- Matlab, Kml, C, Html, Sql, Php, Fortran.

HOBBIES

- Analog and digital electronics.
- Audio amplifiers (design, assembling and repairing).
- Radio devices (design, assembling and repairing).
- Mountain sports, bike riding, swimming.
- Cooking (plus eating and drinking)
- Carpentry