

PERSONAL INFORMATION

Rosa Lasaponara



 Corso Umberto I, n.32, 85100 Potenza (Italy)

 +390971427214  +393286271131

 rosa.lasaponara@imaa.cnr.it

Sex Female | Place and Date of birth Irsina (Mt), 08 July 1965 | Nationality Italian

WORK EXPERIENCE

2010 - 2012 Visiting research scientist at (i) CAS - Chinese Academy of Science, China; (ii) CONAE Space Flight Center, Argentina, CONICET (Argentina)

2008 – Present Head of ARGON (Earth Observation for ARchaeoloGY and EnvirONment) Group of the Institute of Methodologies for Environmental Analysis of the National Research Council, IMAA-CNR

2002 – Present Research Scientist, Institute of Methodologies for Environmental Analysis of the National Research Council, IMAA-CNR

1999 – 2001 Research Scientist, at the University of Basilicata, Italy

1990– 2013 External Consultant for national and International projects (BiolItaly, Natura 2000, FesR.,, etc)

EDUCATION

1999 Ph.D. Methods and Technologies for Environmental Monitoring, University of Florence, Italy

1994 Master of Science : Environmental and Territory Engineering, Politecnico di Bari , Italy

1993 Laurea degree in Electronic Engineering , Politecnico di Bari (Italy)

PERSONAL SKILLS

Mother tongue(s) Italian

Other language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C2	C2	C1	C2	C2

Levels: A1/A2: Basic user - B1/B2: Independent user - C1/C2: Proficient user
[Common European Framework of Reference for Languages](#)

Organisational / managerial skills

Long experience in:

- organisation of scientific events, acquired as Chair (EGU, SPIE, EARSeL, ICCSA) or co-Chair of international Conferences and workshops;
- project management, acquired as PI or coordinator of research projects;
- She set up and currently chairs the special interest group " Remote Sensing for natural and cultural heritage" of the European Association of Remote Sensing Laboratories (EARSeL) in cooperation with and supported by UNESCO
- international programs, acquired as member or chair of international working groups.
- Permanent Member of the PhD committee (2006-present) of "Ingegneria dell'Ambiente" at the DIFA University of Basilicata.
- Editorial activities : (i) Editor of NHESS Natural Hazards and Earth System Sciences, (ii) member Editorial Board of (i) Sensors; (ii) Remote Sensing, (iii) Photointerpretation (iii) guest Editor for international peer reviewed journals, such as : Ecological Modeling, International Journal Of Remote Sensing, Journal of Applied Earth Observation and Geoinformation, Photointerpretation
- Managerial skills :She set up and chaired (2007-2011) the Meogeo spin off of the CNR

Job-related skills

Active in the research field of time series analysis and remote sensing of the (i) biosphere (ii) risk estimation, modelling and monitoring by passive and active sensors since 1993.

- Integration of active and passive techniques for biosphere monitoring (2003-present).
- Development and assessment of Integrated model for forest fire monitoring (1994-present).
- Development and application of algorithms for time series data analysis for change detection and operational monitoring of land degradation (1999 – present).
- Development and application of algorithms for data fusion, edge detection, and pattern recognition for investigating the dynamics of anthropogenic environmental changes (1998 – present).
- Reconstruction of paleoenvironmental scenarios aimed at understanding the mutual relationships between the dynamics of environmental change and evolutionary processes of human presence; (2003 – present).

Coordinator of International and national projects (some of the current activities are listed below):

- Smart management of cultural heritage sites in Italy and China: Earth Observation and pilot projects funded by the Ministero degli Affari Esteri –MAE PGR00570 2012-2015
- Earth Observation Technologies for the survey, investigation and valorisation of Ancient Aqueduct systems in Peru International funded in the framework of the Cooperation CNR-CONCYTEC 2012-2014 n. 0031559
- FIRE-SAT an integrated model to real time monitoring of forest FIRE Funded Protezione Civile in the framework of operational monitoring of risk using Earth Observation Technologies by 2012- 2013

Partner of EU projects (some of the current activities are listed below):

- EU funded "ArchaeoLandscapes Europe" (*ArcLand*)
<http://www.archaeolandscapes.eu/index.php/en/about/aims.html>
- FP7 Beyond Building Capacity for a Centre of Excellence for EO-based monitoring of Natural DisasterFP7-REGPOT-2012-2013-1
-

External consultant for

projects funded by the Italian Space Agency, such the current

- (i) World Heritage monitoring by Remote Sensing (WHERE)
- (ii) Soil Slow Motion Monitoring by interferometry (SoS-MT-Monitoring)

Reviewer of EU project proposals

Reviewer for BeLspo (Belgian Science Policy Office) funded projects

Member of steering committee of national and international projects

ADDITIONAL INFORMATION

Publications

Selected publications from the last recent years:

1. Lasaponara R., 2013 Geospatial analysis from space: Advanced approaches for data processing, information extraction and interpretation JAG Vol 20 ISSN 0303-2434 pp 1-3 (IF= 1.744)
2. Lanorte A., M. Danese R. Lasaponara , B. Murgante 2013 Multiscale mapping of burnt area and severity using multisensory satellite data and spatial autocorrelation analysis JAG Vol 20 ISSN 0303-2434 pp 42-51 (IF= 1.744)
3. Lasaponara R, Lanorte A "Satellite time series analysis: from local analysis to a global view". INTERNATIONAL JOURNAL OF REMOTE SENSING, ISSN: 0143-1161 (IF= 1.12)
4. Telesca, L., Lasaponara, R. (2010) Analysis of time-scaling properties in forest-fire sequence observed in Italy. In: Ecological Modelling, 221 (2010), pp. 90-93. (IF= 2.33)
5. Corral A., Telesca, L; Lasaponara, R 2008 "Scaling and correlations in the dynamics of forest-fire occurrence" PHYSICAL REVIEW E 77, 016101 (IF= 2.25)
6. Lasaponara R, Lanorte A (2007). On the capability of satellite VHR QuickBird data for fuel type characterization in fragmented landscape. ECOLOGICAL MODELLING, vol. 204, p. 79-84, ISSN: 0304-3800. (IF= 2.33)
7. Lasaponara R (2006). On the use of Principal Component Analysis (PCA) for evaluating interannual vegetation anomalies from SPOT/VEGETATION NDVI temporal series. ECOLOGICAL MODELLING, vol.194, p. 429-434, ISSN: 0304-3800 (IF= 2.33)
8. Lasaponara R (2006). Estimating Spectral separability of satellite derived parameters for burned areas mapping in the Calabria Region by using SPOT-Vegetation data. ECOLOGICAL MODELLING, vol. 196, p. 265-270, ISSN: 0304-3800 (IF= 2.33)
9. Telesca L., Lasaponara R (2006). Pre- and post-fire behavioral trends revealed in satellite NDVI time series. GEOPHYSICAL RESEARCH LETTERS, vol. 33, L14401, ISSN: 0094-8276, doi:10.1029/2006GL026630 (IF= 3.792).
10. Lasaponara R (2006). Estimating Interannual Variations in Vegetated Areas of Sardinia Island Using SPOT/VEGETATION NDVI Temporal Series. IEEE GEOSCIENCE AND REMOTE SENSING LETTERS, vol. 3, p. 481 -- 483, ISSN: 1545-598X (IF= 1.56)
11. Lasaponara R, Lanorte A (2006). Multispectral fuel type characterization based on remote sensing data and Prometheus model. FOREST ECOLOGY AND MANAGEMENT, vol. 234, S226, ISSN: 0378-1127 (IF= 2.49)
12. Lasaponara R, Telesca L (2006). Quantifying intra-annual persistent behavior in SPOT-VEGETATION NDVI data for Mediterranean ecosystems of southern Italy. REMOTE SENSING OF ENVIRONMENT, vol. 101, p. 95-103, ISSN: 0034-4257 (IF= 4.57).

International reports

Contribution to recent international reports:

- Report on the state of the art of Fuel modelling and Earth Observation techniques for fuel mapping from global scale down to a local scale of observation (2011, JRC)
- Recommendations on the use of Earth Observation Techniques for risk assessment and monitoring for natural and Cultural heritage (2012 EARSeL- UNESCO activities)
- .On the use of low cost Remote sensing technologies for fire monitoring: from danger estimation, fire detection, severity assessment and post fire recovery (2012 EARSeL- UNESCO activities)

Selected Projects

Current running

- Scientific responsible for CNR- of the EU of "ArchaeoLandscapes Europe" (*ArcLand*) <http://www.archaeolandscapes.eu/index.php/en/about/aims.html>
- FP7 Beyond Building Capacity for a Centre of Excellence for EO-based monitoring of Natural Disaster FP7-REGPOT-2012-2013-1
- PI of Smart management of cultural heritage sites in Italy and China: Earth Observation and pilot projects funded by the Ministero degli Affari Esteri --MAE PGR00570 2012-2015
- PI of Earth Observation Technologies for the survey, investigation and valorisation of Ancient Aqueduct systems in Peru International funded in the framework of the Cooperation CNR-CONCYTEC 2012-2014 n. 0031559
- PI of FIRE-SAT an integrated model to monitoring in real time of forest FIRE Funded Protezione Civile in the framework of operational monitoring of risk by 2012- 2013

- Participation to ESA Project “Assessing Satellite SAR data for Landscape and archaeology” Id. 11073
- Participation in the Project “Smart Cities and Communities and Social Innovation” (Avviso MIUR n.84/Ric 2012, PON 2007 – 2013 del 2 marzo 2012) Misura IV.1, IV.2., 2013- 2015
- PI of Remote Sensing technologies for Natural and Cultural heritage Degradation Monitoring for preservation and valorization (MITRA) 2012-2014
- Participation in the Project “ World Heritage monitoring by Remote Sensing (WHERE)” funded by ASI 2012-2013
- Participation in the Project “Soil Slow MoTion Monitoring by interferometry” (SoS-MT-Monitoring) funded by ASI 2012-2013
- PI of the project “From LiDAR survey to virtual reconstruction” Basilicata Innovazione 2013-2014 FESR action
- PI of the project “Low cost technologies for fire monitoring: from the performance assessment to the availability of operative tools” funded by Basilicata Innovazione 2012-2013 FESR action

Past Projects

- PI of FIRE-SAT an integrated model to real time monitoring of forest FIRE Funded Protezione Civile in the framework of operational monitoring of risk using Earth Observation Technologies by 2010- 2012
- Scientific responsible for the CNR_IMAA activities of the FUELMAP” Development of a European fuel map” Contract notice n 2008/S 116-153998 del 17/06/06 Tender funded by Joint Research Centre- Institute for Environment and Sustainability (JRC- IES) ISPRA (Italia)
- PI “Fuel model, mapping and real time fire monitoring ” Funded by Protezione Civile 2007/2009
- PI of FIRE-SAT an integrated model to real time monitoring of forest FIRE Funded Protezione Civile in the framework of operational monitoring of risk using Earth Observation Technologies by 2008- 2010
- PI “Investigating of Landscape transformation and the impact of Human activities integrating Earth Observation and ancillary data sources” DG.RSTL.055.010 funded by CNR 2005-2010
- Scientific responsible for the CNR_IMAA activities of the “Preview Winter Fire FP6 project : framework of EURORISK/PREVIEW “Prevention, Information and Early Warning pre-operational services to support the management of risks VI FP- Integrated project
- Scientific responsible for the CNR_IMAA activities of the CYBER-PARK FESR 2000 –Pilot project for the management of natural Protected areas” funded by the Puglia Region
- Scientific responsible for the CNR-IMAA activities of the PROSCENIO funded by Protezione Civile Nazionale 2005-2007
- PI of Fire susceptibility estimation in the Mediterranean ecosystems by using AATSR, MODIS, VEGETATION, and AVHRR data” n 1503 ESA (European Space Agency)
- Participation to the programme “Development of industrial districts for the Earth Observation” (Programma PON 2000-2006, MIUR).
- Participation in the Project “Development and improvement of the CNR-IMAA Earth Observation Facility” (Programma PON 2000-2006 PC.P01.001)
- Participation in the Project Bioltaly and Natura 2000 for the Puglia Region 1994-1996

Memberships

Chair of the EARSeL special interest group " Remote Sensing for natural and cultural heritage" of the European Association of Remote Sensing Laboratories (EARSeL) in cooperation with and supported by UNESCO (since 1997-present)

Science Office for Forest Fire Natural hazard Division (since 2010 –present)

Member of the EARSeL bureau (2010-present).

Member of the scientific committee of the Computational Science and Its Applications – ICCSA (2009-present)

General Secretary of EARSeL (2012-present)

Member of EGU (since 1997-present)

Member of CNIT (Consorzio Nazionale Interuniversitario per le Telecomunicazioni) since 1998