

Giovanni Cuozzo, Curriculum Vitae

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Personal Information

Place of Birth: Mugnano di Napoli, Napoli (I)

Date of Birth: 26/05/1968

Citizenship: Italian

Education

2006 PhD in Electric Engineering and Information Technology from the University of Cassino – Italy. Thesis title “Optical and Radar Data Analysis based on a Markov Model of the Image”. Supervisor: Gilda Schirinzi. Co-supervisor: Ciro D’Elia

2003 Laurea (Master Degree) in Telecommunication Engineering from University Federico II of Naples (Italy). Thesis title “Multispectral Image Segmentation using Stochastic Relaxation”. Supervisor: Giovanni Poggi. Co-supervisor Giuseppe Scarpa.

Final evaluation 110/110 cum laude

Current Position: Senior Researcher

Professional Experience:

Since 2010: EURAC Research of Bolzano:

- Data Manager for SAR data
- Operator of the EURAC Satellite Receiving Station
- Soil Moisture Retrieval using SAR data

2006 -2010 MARSec (Mediterranean Agency for Remote Sensing and Environmental Control) of Benevento (Italy)

- Staff member – in the certification process of MARSec as RADARSAT-1 Network Station
- Responsible for activities of planning, acquisition, processing and delivering in NRT of RADARSAT-1 data
- Specialised in Marine Applications of Synthetic Aperture Radar (Windmap retrieval and Ship detection) and SAR interferometry

2004: D'Appolonia S.p.A.

- Implementation of a failure predictor system based on Bayesian Networks (Telelog Project)

2003 - 2004: University of Naples Federico II

- Postdoc on: Effects of Compression on Multi-Temporal Satellite Images

Relevant Teaching Experience

2004 Lectures on SAR data modelling for the MASTER TARGET organised by the Università del Sannio di Benevento

2005 Lectures on G723.1 standard within the agreement between Università di Cassino and URMET

2006 Lecturer of the course of Remote Sensing of the Università del Sannio di Benevento

Peer-reviewed publications in international journals

1. **G. Cuozzo**, M. di Bisceglie, A. Fusco, "Random Walk Approach for Wave Propagation through Atmospheric Layers and Its Application to Differential Synthetic Aperture Radar" IEEE Trans. on Aerospace and Electronic System, Vol 46, No. 4 October, 2010 pp.1687-1698.

Publications on national journals

1. Fusco A., Buonanno S., **Cuozzo G.**, "Innovazione e Alta Tecnologia dal Sud - L'attività del Mediterranean Agency for Remote Sensing and Environmental Control – MARSec", Ambiente Risorse Salute n. 116 Gennaio-Marzo 2008
2. **Cuozzo G.**, Focareta M., Fusco A., "Metodologia innovativa per il monitoraggio delle instabilità di versante nella provincia di Benevento mediante telerilevamento radar", Ambiente Risorse Salute n. 120, Gennaio - Marzo 2009

Papers in proceedings of international and national conferences (2012-2014)

3. G.Chinellato, **G. Cuozzo**, M. Callegari, B. Thiebes, R. Kenner, and M. Petitta "Integration and assimilation of remote and terrestrial data for monitoring rock glaciers deformations: the innovative experiences from the SloMove project", EGU April 2015, Vienna
4. F.Greifeneder, C. Notarnicola, **G.Cuozzo**, N.Spindler, G. Bertoldi, S. Della Chiesa, G. Niedrist, J.Stamenkovic, and W. Wagner Analysis of ASAR Wide Swath Mode time series for the retrieval of soil moisture in mountainous areas, Geophysical Research Abstracts, Vol. 16, EGU2014-14383, 2014,EGU General Assembly 2014
5. S. Paloscia, E. Santi, S.Pettinato, C. Notarnicola, **G. Cuozzo**, F. Greifeneder, G. Bertoldi, The use of Cosmo-SkyMed images for retrieving snow depth and soil moisture in mountainous areas, IGARSS 2014&35th Canadian Symposium on Remote Sensing, Quebec, Canada, 13-18 July 2014.

6. C. Notarnicola, L. Pasolli, **G. Cuozzo**, F. Greifeneder, G. Bertoldi, S. Della Chiesa, G. Niedrist, D. Castelletti, U. Tappeiner, L. Bruzzone, M. Zebisch, TEMPORAL AND SPATIAL SOIL MOISTURE DYNAMICS IN MOUNTAIN MEADOWS BY INTEGRATING RADARSAT2 IMAGES AND GROUND DATA, IGARSS 2014 & 35th Canadian Symposium on Remote Sensing, Quebec, Canada, 13-18 July 2014.
7. Bertoldi G., C. Notarnicola, F. Greifeneder, **G. Cuozzo**, S. Della Chiesa, G. Niedrist & U. Tappeiner, Un confronto multi-temporale tra la stima dell'umidità del terreno con immagini SAR e modello idrologico in ambito alpino, IDRA 14, XXXIV Convegno Nazionale di Idraulica e Costruzioni Idrauliche Bari - 8/10 Settembre 2014.
8. F. Greifeneder, C. Notarnicola, **G. Cuozzo**, G. Bertoldi, S. Della Chiesa, G. Niedrist, J. Stamenkovic, W. Wagner: Estimation of surface soil moisture in alpine areas based on medium spatial resolution SAR time-series and upscaled in-situ measurements. SPIE Remote Sensing, Amsterdam, Netherlands, September 2014.
9. J. Stamenkovic, C. Notarnicola, N. Spindler, **G. Cuozzo**, G. Bertoldi, G. Niedrist, S. Della Chiesa, F. Greifeneder, D. Tuia, M. Borgeaud, J. P. Thiran, Soil moisture estimation using synergy of optical, SAR, and topographic data with Gaussian process regression, SPIE Remote Sensing, Amsterdam, Netherlands, September 2014.
10. T. Firdausy, A. Costa, R. Monsorno, **G. Cuozzo**, C. Steurer, "Development and Implementation of an INSPIRE based SDI Case study" EnviroInfo, Dessau 2012.
11. S. Buonanno, **G. Cuozzo**, A. Fusco, "Wind map retrieval from SAR data for offshore wind turbines positioning", ISIE 2008, Cambridge – IEEE International Symposium on Industrial Electronics.
12. **G. Cuozzo**, M. Di Bisceglie, A. Fusco, "The Role of Spatial Interactions for Prediction of the Spectral Structure of the Atmospheric Phase Screen", IGARSS 2007, Barcelona
13. B. Aiazzi, L. Alparone, S. Baronti, **G. Cuozzo**, C. D'Elia, G. Schirinzi, "Automated Content Extraction from SAR Data", IGARSS 2006, Denver
14. **G. Cuozzo**, C. D'Elia, C. De Stefano, F. Fontanella, C. Marrocco, M. Molinara, A. Scotto di Freca, F. Tortorella, "Comparison of Object-Based Classification Techniques on Multispectral Images", ESA-EUSC 2005, Frascati
15. B. Aiazzi, L. Alparone, S. Baronti, **G. Cuozzo**, C. D'Elia, G. Schirinzi, "SAR Image classification via Tree-Structured Markov Random Fields and Information-Theoretic Heterogeneity Features", ESA-EUSC 2005, Frascati
16. A. Budillon, **G. Cuozzo**, G. D'Elia, G. Schirinzi, "Application of Overcomplete ICA to SAR Image Compression", IGARSS 2005, Seoul
17. B. Aiazzi, L. Alparone, S. Baronti, **G. Cuozzo**, C. D'Elia, G. Schirinzi, "SAR Image Segmentation through Information-Theoretic Heterogeneity Features and tree-Structured Markov Random Field", IGARSS 2005, Seoul
18. **G. Cuozzo**, C. D'Elia, V. Puzzolo, "A Method Based on Tree-Structured Markov Random Field for Forest Area Classification", IGARSS 2004, Anchorage.