



## **Dr. Jolanda Patruno**

### **Earth Observation Engineer**

Rhea Group c/o ESA/ESRIN

[jolanda.patruno@esa.int](mailto:jolanda.patruno@esa.int)

### **Background**

Jolanda achieved her MSc degree in Aerophotography and Ancient Topography at the University of Rome "La Sapienza", (Faculty of Archaeology) focusing on Earth Observation data exploitation for Cultural Heritage. In 2012, in the frame of a European joint PHD programme (Italy-France), she joined the Remote Sensing Team (ex SAPHIR team) that is part of the Propagation-Localization & Remote Sensing Department at the Institute of Electronics and Telecommunications of Rennes, I.E.T.R. (France). The main line of her PhD research was focused on the use of full-polarimetric SAR multi-frequency data for monitoring desert environments and UNESCO sites in danger, but she gained as well skills in optical medium and high-resolution data processing and GIS.

Until July 2017, she had been working as Earth Observation engineer for satellite projects focused on EO data exploitation, image quality and performance assessment and Cal/Val activities in Akka Technologies at Telespazio (Italy). From August 2017, Jolanda has been working as Earth Observation Engineer for Rhea Group as Earth Observation Data Exploitation and Application Engineer at the European Space Agency (ESRIN, Italy) in the EOP-SDP Division, providing engineering support for Thematic Exploitation platforms (TEPs) and supporting a variety of projects and applications as SAR expert.

### **Activities in education**

Lecturer to the following Remote Sensing Courses:

- Uso de imagenes satelitales SAR en estudios de patrimonio natural y cultural (CONAE, CNR, MAE, ESA), 2014, ESA/ESRIN, Frascati, Italy
- Remote Sensing applications for the study and observation of landscapes, 2013, Matera, Italy
- 2nd Advanced Course on Radar Polarimetry, 2013, Frascati, Italy
- First Remote Sensing and Cultural Heritage Course, 2012, Ghent, Belgium

Jolanda has been lecturer for “La Sapienza” University of Rome at Faculties of Engineering, Archaeology, Architecture.

### **Recent projects**

- Thematic Exploitation Platforms (G-TEP, U-TEP)
- International Charter Space and Major Disaster
- PolSARpro ESA Toolbox

### **Selected publications**

T. Papadopoulou, P. Bally, F. Pacini, J. Patruno, M. Fournelis, *ESA's Thematic Exploitation Platforms initiative and the GEP*, 1<sup>st</sup> Conference of the Remote Sensing and Space Applications Committee of the Geological Society of Greece, 21 February 2018, Athens, Greece

J. Patruno, A. Di Iorio, S. De Angeli, Cultural Landscape risk Identification, Management and Assessment (CLIMA), *Advances in remote sensing for cultural heritage: from site detection, to documentation and risk monitoring*, 12 - 13 November 2015, ESA – ESRIN, Frascati (Rome), Italy

J. Patruno, N. Dore, E. Pottier, M. Crespi, *New research in polarimetric SAR technique for archaeological purposes using ALOS PALSAR data*, in *Archaeological Prospection*, 2013, Vol.20, pp. 89-96

J. Patruno, N. Dore, M. Crespi, E. Pottier, *A multi-sensor polarimetric analysis over archaeological sites*, Geoscience and Remote Sensing Symposium (IGARSS) 2012 IEEE International, Munich (Germany), 22-27 July 2012