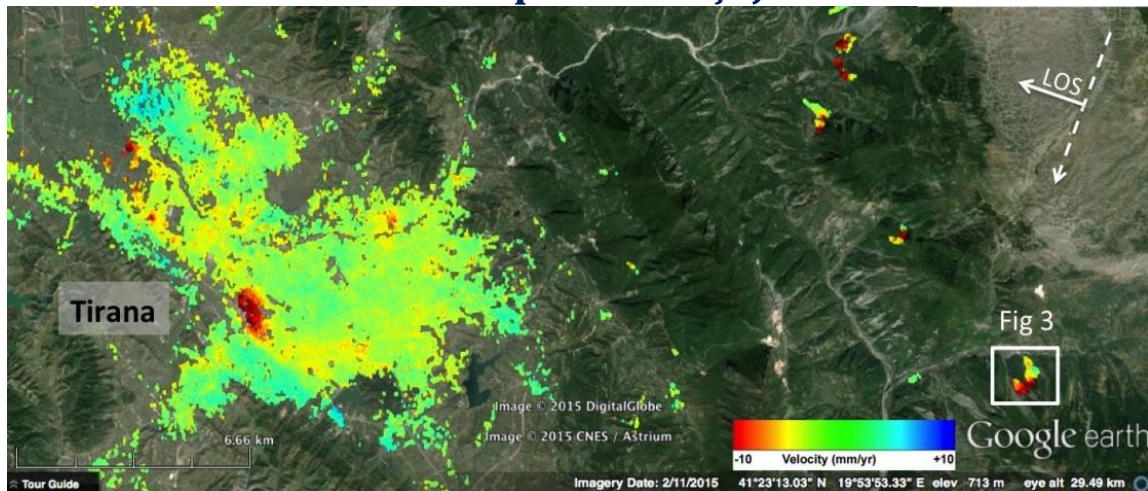


Course announcement

“Earth observation with optical instruments and SAR” PhD. Spartak Kuçaj



Hours 8 - 1 cfu

**Classes will be in English
Compulsory attendance**

Final test based on a series of questions given on the last day.

Wednesday 14 June 2023 “Earth observation with optical instruments and SAR”

Thursday 15 June 2023 “Case studies-deformation monitoring by SAR”

ABSTRACT

“Earth observation with optical instruments and SAR”

The Earth Observation with Optical Instruments and Synthetic Aperture Radar (SAR) course is designed to provide participants with a comprehensive understanding of remote sensing techniques and applications using both optical and SAR technology. The course will explore the principles, data acquisition and analysis methods for extracting valuable information about the Earth’s surface, atmosphere and oceans. Participants will gain hands-on experience in processing optical and SAR data, interpreting images and utilizing advanced tools and software for Earth observation. Through a combination of lecturers, practical exercises and case studies, participants will develop the skills and knowledge necessary to leverage optical and SAR data for various environmental monitoring, resource management and disaster response applications.

OBJECTIVES:

1. Familiarize participants with the principles and concepts of remote sensing, optical instruments and SAR technology.
2. Provide a comprehensive overview of data acquisition techniques and satellite platforms used in Earth observation.
3. Introduce participants to pre-processing techniques including radiometric and geometric corrections.
4. Explore image interpretation methods and feature extraction techniques specific to optical and SAR data.
5. Enable participants to analyse and integrate optical and SAR data for environmental monitoring, land cover classification and change detection.
6. Introduce participants to tools and software packages used for processing and analysis.
7. Discuss the applications of optical and SAR data in various fields, such as agriculture, forestry, urban planning and disaster response.

SHORT CV: Spartak KUÇAJ

Education:

- Master's Degree in Mining Engineering – FGM, PUT, 2007
- Ph.D. in Mining Engineering Resources – FGM, PUT, 2016

Professional Experience:

- Lecturer, FGM-PUT, +14 years: Teaching in surveying, remote sensing, photogrammetry and GIS courses, including practical exercises and student guidance.
- Member, Mining Surveyors-Geomatics Association: Actively involved in surveying and remote sensing community, participating in conferences, workshops and knowledge-sharing initiatives.
- Freelancer in surveying, GIS, photogrammetry and remote sensing.

✉ **Register by** sending email to:
tea.taraborelli@unich.it

*For those not at University of Chieti-Pescara it is possible to follow the short course online:
specify request when you register.*

TIMETABLE			
WEDNESDAY	14 June 2023 Room M4 Polo Micara, Pescara Campus	9.00	13.00
THURSDAY	15 June 2023 Room M4 Polo Micara, Pescara Campus	9.00	13.00