







## **AIT Summer School**

The <u>Italian Association of Remote Sensing</u> (AIT), jointly with the <u>Institute for Electromagnetic Sensing of the Environment</u> (IREA) of the National Research Council of Italy (CNR), in cooperation with <u>Copernicus/Sentinel</u> of the European Space Agency (ESA) and <u>European Association of Remote Sensing</u> <u>Laboratories</u> (EARSeL), organizes a 5-days summer school on:

## SENTINEL FOR WATER RESOURCES

AIT actively participates at the EARSeL activities and CNR-IREA is Member since its foundation in 1977. AIT is the promoter of the <u>European Journal of Remote Sensing</u> (EuJRS).

TOPICS: Copernicus, ESA Sentinel 1, Sentinel 2 and Sentinel 3 missions with focus on Water Resources, water quality measurements and analysis, and operational applications. The topics will include: emergency mapping (flood event case study), water quality and fieldworks, ocean color radiometry, biogeochemical modeling, hydrological cycle and related parameters.

VENUE: At CNR-IREA Stazione Sperimentale, Experimental Station Eugenio Zilioli, Sirmione (BS), Italy.

DATE & TIME: from September 18<sup>th</sup> to September 22<sup>nd</sup>, 2017. Lessons start at 12:30 AM on Monday September 18<sup>th</sup> and end at 01:30 PM on Friday September 22<sup>nd</sup>.

SCIENTIFIC ORGANIZATION: AIT in cooperation with CNR IREA, Copernicus/Sentinel of ESA and EARSeL.

OBJECTIVES: AIT, jointly with CNR-IREA, Copernicus/Sentinel of ESA and EARSeL organizes a Summer School on Earth System Monitoring to promote the exploitation of Earth Observation (EO) data across disciplines, with a specific focus on their assimilation into Water Resources.

- The School includes lectures covering an overview of the recent ESA Sentinel mission, Earth System Modelling, Data Assimilation, as well as hands-on data processing exercises.
- The one-week course aims to provide students with an integrated end-to-end perspective ranging from measurement techniques to operational applications.
- A boat excursion in southern part of Lake Garda will be organized with the goal to collect field data through ad-hoc instrumentation: water sampler and radiometric measurements.
  Sample collection will be carried out on Thursday 21<sup>st</sup> (weather permitting) exploiting the simultaneous scheduled acquisition of Sentinel-2 of Lake Garda A scientific visit to the Sun photometer station of the AERONET network - Catullo Grotte site - is also planned.

PARTICIPANTS: The school is open to early career scientists, such as Ph.D. students, young post-doctoral scientists, specialized in Earth Science disciplines and wishing to expand and improve their knowledge

and skills for water applications. Participation is limited to a maximum of **15 students**, therefore a selection based on CVs and motivation letters will be carried out.

- FEES: The cost to be entirely paid to AIT one month before the Summer School start is **750 Euro**. The fees include attendance to the lectures and laboratories (including the boat excursion), accommodation and luncheons cost. Travel costs are not included. (Financial support is not available).
- LAPTOP: each student has to use the own device with adequate capacity for image processing. We recommend having the <a href="SNAP tool">SNAP tool</a> already installed; a license of ENVI (Harris Geospatial Solutions) will be made available for all students attending the Summer School. Satellite images, instrumentations (e.g. spectroradiometers) for the field excursion are provided by CNR-IREA.

DEADLINE: April 30th, 2017.

## FILL THE APPLICATION FORM

and send to: enrico.borgogno@unito.it

## AIT SECRETARIAT

Enrico Borgogno –enrico.borgogno@unito.it AIT c/o ITHACA/Politecnico di Torino C.so Castelfidardo 30/a 10138 Torino, Italy Tel: +39 011 19751851