



# GPR and Electromagnetics for Sensing Soil, Objects and Structures: Forward Modelling, Inversion Problems and Practical Aspects.

**ISPC-CNR**



**January 29<sup>th</sup>- February 1<sup>st</sup> 2020**

**Venue: Open Space Room**

**Address: Palazzo Carafa, via dei Fedele 1 (close to “Piazza Sant’Oronzo”) , Lecce, Italy**

**UCL**

**Université  
catholique  
de Louvain**

## Organisation

- *Associazione Italiana del Georadar*
- *Institute of Sciences for the Cultural Heritage ISPC-CNR*
- *Northumbria University*
- *Catholic University of Leuven*
- *Institute for the Remote Sensing of the Environment IREA-CNR*
- *Sapienza University*
- *American University of Rome*
- *IDSGeoradar*
- *Geostudi Astier*



istituto per il rilevamento  
elettromagnetico  
dell'ambiente



## Teachers

- Pier Matteo Barone (American School of Rome)
- Ilaria Catapano (IREA-CNR)
- Fabio Giannino (IDSgeoradar)
- Guido Manacorda (IDSgeoradar)
- Gianfranco Morelli (Geostudi Astier)
- Sebastien Lambot (Catholic University of Leuven)
- Giovanni Leucci (ISPC-CNR)
- Lara Pajewski (Sapienza University)
- Francesco Soldovieri (IREA-CNR)
- Craig Warren (Northumbria University)



*Introduction by Raffaele Persico (ISPC-CNR)*



# Program

January 29 2020, Wednesday

## Morning

Speaker	Time	Title
Raffaele Persico	08:45-09:00	Presentation of the Italian Association of the GPR
Guido Manacorda	09:00-10:30	What really matter in effective GPR design: real performance and compliance to regulations
Lara Pajewski	10:30-12:30	GPR prospecting in civil engineering according to COST Action TU1208 guidelines
Gianfranco Morelli	12:30-14:00	Massive array systems for investigation on concrete

## Afternoon

Speaker	Time	Titile
Fabio Giannino	15:30-17:00	Massive array systems for fast mapping of subservices
Craig Warren	17:00-18:30	An Introduction GPR modelling using gprMax

January 30 2020, Thursday

## Morning

Speaker	Time	Title
Craig Warren	09:00-11:00	From simple to complex simulations - a series of step-by-step example GPR models
Sebastien Lambot	11:00-13:00	Full-wave modelling of radar data and inversion for reconstructing layered media

## Afternoon

Speaker	Time	Titile
Francesco Soldovieri	15:00-16:30	Inversion in GPR and electromagnetic problems
Illaria Catapano	16:30-18:00	THz devices for sensing of works of art

January 31 2020, Friday

## Morning

Trainers	Time	Title
Fabio Giannino, Gianfranco Morelli, Giovanni Leucci	09:00-13:00	Data gathering with GPR and ERT

## Afternoon

Speakers	Time	Titile
Fabio Giannino, Gianfranco Morelli and Giovanni Leucci	15:00-17:00	Processing of at least part of the gathered data

**February 1 2020, Saturday**

**Morning**

<b>Speaker</b>	<b>Time</b>	<b>Title</b>
<b>Giovanni Leucci</b>	<b>09:00-11:00</b>	<b>Electromagnetic devices in geophysics</b>
<b>Pier Matteo Barone</b>	<b>11:00-13:00</b>	<b>Positioning Systems</b>

**Fees**

For the present school, we give the possibility to register for one day, more days or for the entire event with some discount. The price per day is dependent on the number of scheduled hours. The price for two or three days is given by the sum of the prices scheduled for each day. A discount for students is applied too. The fees include the VAT, that in Italy is 22%.

**Table of costs**

<b>Time</b>	<b>Fee</b>
<b>January 29</b>	<b>80 euros+VAT=97,6 euros</b>
<b>January 30</b>	<b>70 euros+VAT=85,4 euros</b>
<b>January 31</b>	<b>60 euros+VAT=73,2 euros</b>
<b>February 1</b>	<b>40 euros+VAT=48,8 euros</b>
<b>Entire course</b>	<b>200 euros+VAT=244 euros</b>
<b>Entire course for universitary students</b>	<b>100 euros+VAT=122 euros</b>

The payment can be done by means of a bank transfer to the Italian Association of the GPR (Associazione Italiana del Georadar). For information about the bank coordinates and for any information in general you can contact the Association at [info@gpritalia.it](mailto:info@gpritalia.it) or you can phone to dr. Raffaele Persico at +393485480778.

Some of the lessons will be recorded and the video will be put at disposal of the firms of the Association. So, please be aware that any registration to the event implies the ACCEPTATION of this condition.

We are in contact with some Professional Orders in order to ask for the acknowledgment of official formation credits.