

# Course on Interferometric Point Target Analysis (IPTA)

## *Principles and processing approach*

**19 – 22 November 2024 (3 ½ days)**

In **Persistent Scatterer Interferometry (PSI)** and **SBAS** the temporal and spatial characteristics of interferometric signatures collected from point targets are exploited to accurately map surface deformation histories, terrain heights, and relative atmospheric path delays. Our course addresses theoretical aspects of Persistent Scatterers Interferometry as well as practical approaches supported by GAMMA's **Interferometric Point Target Analysis (IPTA)** Software module.

The course covers the following aspects

- Principles of Persistent Scatterer Interferometry (PSI) and Short Baseline Interferometry (SBAS)
- Step by step discussion of PSI and SBAS processes with IPTA (point identification, phase unwrapping, atmospheric phase model, etc.) for selected cases.

The course includes theoretical parts (presentations) as well as practical parts (hands-on) with the participants conducting the actual processing steps.

This course is suited to participants who

- are interested in PSI and would like to gain an insight on the IPTA processing approach
- are familiar to IPTA but require more in depth knowledge of IPTA processing capabilities

The course will be held by GAMMA personnel. Course language is English.

The course is planned to take place on-site (at GAMMA).

### **Schedule**

Tue, 19 Nov	09:00 – 12:00 13:30 – 17:00	Introduction to PSI and SBAS First part of single reference stack PSI processing
Wed, 20 Nov	09:00 – 12:00 13:30 – 17:00	Second part of single reference stack PSI processing First part of multi reference stack PSI processing
Thu, 21 Nov	09:00 – 12:00 13:30 – 17:00	Second part of multi reference stack PSI processing First part of SBAS processing
Fri, 22 Nov	09:00 – 12:00	Second part of SBAS processing

### **Location**

GAMMA Main Office in Gümligen, near Bern. GAMMA is easily reachable with public transport (tram, local train) from Bern. For information on accomodation in Bern visit <http://www.berninfo.com>.

### **Course fees**

**Regular: 3600 Swiss Francs (CHF)**

**Students: 2400 Swiss Francs (CHF)**

The fee includes course material, all lunches and a social event on one of the evenings. Participants are required to have own insurance. Registration is required as number of participants is limited. Please use the application form.

### **Contact**

For more information please contact

Dr. Maurizio Santoro, E-mail: [santoro@gamma-rs.ch](mailto:santoro@gamma-rs.ch), Tel: +41-(0)31-9517005 / Fax: +41- (0)31-9517008.

# Application form

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To register, please fill in the application form and send it back before 5 November 2024 per email to [santoro@gamma-rs.ch](mailto:santoro@gamma-rs.ch) or per fax to +41 – (0)31 – 951 70 08.

Upon reception of the application form, an invoice will be sent.

If you have any request or comment please report it in the comments box below.

Family name: \_\_\_\_\_

First name: \_\_\_\_\_

Title (Dr., Prof.): \_\_\_\_\_

Institute: \_\_\_\_\_

Department: \_\_\_\_\_

Address: \_\_\_\_\_

Phone number: \_\_\_\_\_

Fax number: \_\_\_\_\_

E-mail: \_\_\_\_\_

Please select as appropriate

Regular

Student

Comments
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*Herewith I confirm that the information provided in this application is correct. In case of withdrawal from the course, please inform GAMMA Remote Sensing as soon as possible, and no later than 5-Nov-2024.*

Date

Signature of participant

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