

ADVANCED SPRING SCHOOL

Thermal Measurements & Inverse Techniques

– 5th edition –

Station Biologique de ROSCOFF
June 13-18*, 2011

▷ be careful of the date change ◁

Registration Fees[†]:

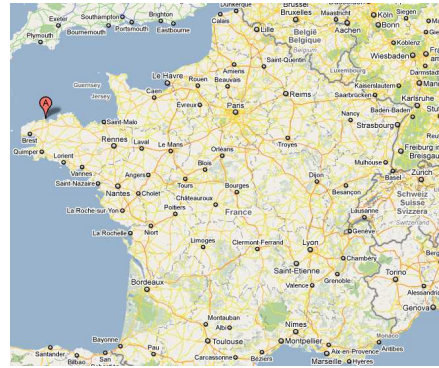
- | | |
|---------------------------------------|---------------|
| ○ PhD Student (double bedroom) | 500 € |
| ○ CNRS employee* | 0 € |
| ○ Academic | 850 € |
| ○ Other | 1200 € |

† The price includes accomodation, meals, proceedings, etc.

* A specific request to CNRS for fee exemption has been validated

▷ If you are considering attending the school, you are requested to follow the registration procedure explained in the web-site, from february 2011 onwards.

Contact: Philippe LE MASSON
Tel: (33) 2 97 87 45 52; Fax: (33) 2 97 88 05 00;
philippe.le-masson@univ-ubs.fr
<http://www.sft.asso.fr/metti5>



After final registration, participants will be asked to complete the travel schedule and tutorial registration form. All the forms, travel details, registration and tutorial selection can be downloaded from the school web-site.

Venue, accommodation & access

* Venue

The school will be held in the “Station Biologique de Roscoff” (<http://www.sb-roscoff.fr/Accueil/>) in Roscoff, a small city in the north coast of Brittany.

* Accommodation

Double and single room accommodation as well as meals are provided within the Gulf Stream Hotel. More many bedrooms will be available at the close-from-course center “Hôtel de France”, “Hôtel Armen le Triton”, “Hôtel aux Tamaris” and “Hôtel Ibis Le Corsaire”.

* Access

→ *By train:* Morlaix railway “TGV” station located at 25 km from Roscoff;

→ *By car:* by Rennes, then follow Brest and take the Roscoff destination by Morlaix;

→ *By plane:* International Brest Guipavas airport.
Taxi shuttles are planned between Morlaix railway station and the “Station Biologique de Roscoff” for both arrival and departure.

Eurotherm Seminar N° 94



Société Française
de Thermique



Third announcement

Metti⁵

“Thermal Measurements & Inverse Techniques”

ADVANCED SPRING SCHOOL

ROSCOFF

– June 13-18, 2011 –

Scope – Techniques for solving inverse problems as well as their applications are currently rapidly developing in all the different domains of physical sciences and particularly in Heat Transfer. Applied mathematicians, statisticians and signal processing specialists generally develop these techniques. Experimentalists desiring to go beyond traditional data processing techniques for estimating the parameters of a model with the maximum accuracy feel often ill-prepared in front of inverse techniques. In order to avoid biases at different levels of this kind of involved task, it seems compulsory that specialists of measurement inversion techniques, modelling techniques and experimental techniques share a wide common culture and language. These exchanges are necessary to take into account the difficulties associated to all these fields. It is in this state of mind that this school is proposed. The METTI Group (Thermal Measurements and Inverse Techniques), which is a division of the French Heat Transfer Society (SFT), has already run or co-organized four similar schools, in the Alps (Aussois) in 1995 and 2005, in the Pyrenees (Bolquère-Odeillo) in 1999 and in Rio de Janeiro (2009). For this fifth edition the school is again open to participants from the European Community with the support of the Eurotherm Committee.

Metti committee

D. MAILLET [COORDINATOR], S. ANDRÉ (Nancy); P. LE MASSON (Lorient); Y. FAVENNEC, B. GARNIER, Y. JARNY (Nantes); C. LE NILIOT, F. RIGOLLET (Marseille); D. PETIT (Poitiers); J.-L. BATTAGLIA, J.-C. BATSALE (Bordeaux); O. FUDYM (Albi); N. LARAQI (Paris); J. VIRGONE (Lyon); J.-J. SERRA (Odeillo); P. MILLAN (Toulouse);

Documents

Two course books will be distributed at the arrival of the participants.



Program

Lectures

Lectures will be given from 9:00 to 12:30 every morning from Monday to Friday on the following courses: L1: Getting started with problematic inversions; L2: Basics for linear inversion, white box case; L3: Models and measurements for thermal systems, types of inverse problems; L4: Non linear parameter estimation problems: tools for enhancing metrological objectives; L5: Measurements with/without contact in heat transfer: principles, implementation and pitfalls; L6: Time/space noise and thermal processing of temperature signal; L7: Optimization techniques for non linear estimation and function estimation; L8: Experimental modelling through identification of low order models; L9: Regularisation: principle and techniques; L10: Inverse heat conduction problems.

Tutorials

Tutorials will be held in the “Station Biologique de Roscoff” between 17:00 and 20:30 from Monday to Friday. They will include an experimental and/or a numerical part. Each participant will be asked to choose tutorials according to the schedule, with a maximum number equal to six, at least.



Organization of the school

Scientific coordination:

- Denis MAILLET, LEMTA, Nancy
Tel. : (33) 3 83 59 56 06
Denis.Maillet@ensem.inpl-nancy.fr

Logistics:

- Philippe LE MASSON, LIMATB, Lorient
Tel. : (33) 2 97 87 45 52
philippe.le-masson@univ-ubs.fr
- Yann FAVENNEC, LTN, Nantes
Tel. : (33) 2 40 68 31 38
yann.favennec@univ-nantes.fr

Language:

- English.

Attendance – About 80 to 100 attendees and instructors (PhD Students, academics, R&D engineers) from different countries.

