# Thermal Measurements & Inverse Techniques

5<sup>th</sup> edition –

# Station Biologique de ROSCOFF June 13-18\*, 2011

 $\triangleright$  be careful of the date change  $\triangleleft$ 



# Registration Fees<sup>†</sup>:

PhD Student (double bedroom)
 CNRS employee\*
 Academic
 Other
 500 €
 0 €
 1200 €

- $\dagger$  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.

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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

- $\rightarrow$  By train: Morlaix railway "TGV" station located at 25 km from Roscoff:
- $\rightarrow$  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.



announcement





# "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.

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

# **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);



# Program

# Lectures

Lectures will be given from 9:00 to 12:30 every morning from Monday to Friday on the following courses: Inverse problems, parametric estimation, nonlinear estimation, optimization, regularization, sensors, function estimation, signal processing, model reduction, etc.

### **Tutorials**

Tutorials will be held in the "Station Biologique de Roscoff" between 17:00 and 20:30 from Monday to Thursday. They will include an experimental and/or a numerical part. The detailed abstracts of the tutorials will be presented on the school website. Each participant will be asked to choose tutorials according to the schedule, with a maximum number equal to six, at least.

#### **Documents**

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

### **Posters**

PhD students and young academics are invited to present their studies with a poster that will be hang in the coffee room in order to facilitate discussions.



# **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.



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