

## Venue

EES-TRNSYS 2003 Days will take place at the Laboratory of Thermodynamics (Sart-Tilman, Liège). Maps of Liège and other information about the meeting are available on the Thermodynamics Laboratory Web site.

## Registration

A registration form is available on the Thermodynamics Laboratory Web site:  
<http://www.ulg.ac.be/labothap>

Registration fee:

### before July 13, 2003:

Three days	150 €
One day	75 €

### after July 13, 2003:

Three days	200 €
One day	100 €

This amount covers the registration, lunches, refreshment and proceedings.

The registration is free for BAG (Building Analysis Group) members. Information about the BAG is given on the Thermodynamics Laboratory web site)

## Accommodation

A block of rooms is reserved, until 13<sup>th</sup> July, with special rates for EES-TRNSYS 2003 participants, at:

MERCURE HOTEL  
Bd de la Sauvenière, 100  
B-4000 Liège  
Phone : + 32 4 221 77 28  
Fax : + 32 4 221 77 01

Single room : € 73  
Double room : € 87

**Please, make your reservation yourself, as soon as possible, mentioning that you are taking part to the meeting!**

## Questions?

Please contact:

Jean Lebrun  
Thermodynamics Laboratory  
University of Liège  
Campus du Sart-Tilman  
Bâtiment B49  
B-4000 LIEGE (Belgium)  
Phone: +32 (0)4 366 48 00  
Fax : +32 (0)4 366 48 12  
E-mail: [j.lebrun@ulg.ac.be](mailto:j.lebrun@ulg.ac.be)  
<http://www.ulg.ac.be/labothap>



Fondation Universitaire Luxembourgeoise

# EES-TRNSYS Days 2003



Thermodynamics Laboratory  
PROMETHE Department  
University of Liège

**August 18-20, 2003  
Liège, Belgium**

# Scope of the meeting

As previous ones, the EES-TRNSYS Days 2003 are organized by the University Foundation of Luxembourg (FUL) and by the Thermodynamics Laboratory of the University of Liège (LT), in close cooperation with the Solar Energy Laboratory of the University of Madison (SEL).

## Meeting Organizers

Coordination: Jean Lebrun (ULg)

EES: Williams Beckman (SEL)  
Jean Lebrun (ULg)  
Philippe Ngendakumana (ULg)

TRNSYS: Christophe Adam (FUL)  
Philippe André (FUL)  
Michaël Kummert (SEL)

## Program

The following program is proposed.

### Monday 18 August

---

#### First session: 9h-10h30

*General presentations of EES and TRNSYS:*

What is new in both programs.

Examples of new models, new features and new applications. (FUL, SEL and ULg)

#### Second session: 11h-12h30

*General presentations (continued):*

Examples of applications developed with both softwares. Presentations made by the participants. If required (according to the number of presentations proposed), this session will be splitted into two parallel sessions.

#### Third session: 14h-15h30

*Tutorial and exercises in four groups:*

EES beginners, EES advanced, TRNSYS beginners and TRNSYS advanced.

A set of basic and advanced examples will be proposed by FUL-SEL-ULg organizers.

A detailed list of examples will be made available.

They will deal, among others, with the following topics:

For EES:

- Basic Thermodynamics
- Heat and mass transfer
- Heat exchangers
- Combustion
- Thermal engines
- Refrigeration systems
- HVAC components and systems

For TRNSYS:

- Solar water heater (basic)
- Building thermal loads (medium)
- Solar heating systems (medium)
- HVAC with ice storage (advanced)
- Solar assisted heat pump system (advanced)
- Bi and tri-generation systems (advanced)

Participants are also invited to bring specific problems they would like to resolve in the field of applied thermodynamics, heat and mass transfer, combustion, thermal machineries, refrigeration, HVAC and building thermo-physics.

### Tuesday 19 August

---

#### Fourth session: 9h-10h30

and

#### Fifth session: 11h-12h30

*Tutorial and exercises (continued)*

#### Sixth session: 14h-15h30

*Presentations and discussions* of results got in previous sessions.

Exchange of practical informations and presentations of new problems to be resolved.

#### Seventh session: 16h-17h30

*Tutorial and exercises (continued)*

### Wednesday 20 August

---

#### Eight session: 9h-10h30

and

#### Ninth session: 11h-12h30

*Tutorial and exercises (continued)*

#### Tenth session: 14-16h

*Presentation and discussion* of results got in previous sessions.

*General discussion* about all possibilities offered by EES, by TRNSYS and by the EES-TRNSYS combination.

*Conclusions and perspectives.*