



**THERMODYNAMICS LABORATORY (LT)
&
BUILDING ENERGY MONITORING AND
SIMULATION (BEMS)**

UNIVERSITY OF LIEGE

EES-TRNSYS Days'2011

September 7th – 9th

University of Liège

Thermodynamics Laboratory

Sart-Tilman Campus

Liège, Belgium



Venue

EES-TRNSYS Days 2011 will take place at the Thermodynamics Laboratory (Sart-Tilman, Liège). Maps of Liège and other information about the meeting are available on the Thermodynamics Laboratory website.

Registration fees

Before August 29th, 2011

Three days250 €
One day120 €

After August 29th, 2011

Three days300 €
One day150 €

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

Registration on website www.labohtap.ulg.ac.be

Contacts

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Accommodation

Mercure Hotel****
Bd de la Sauvenière, 100
B-4000 Liège
Phone : + 32 (0)4 221 77 28
Fax : + 32 (0)4 221 77 01

Hôtel Husa de la Couronne***
Place des Guillemins 11
B-4000 Liège
Phone : + 32 (0)4 340 30 00
Fax : + 32 (0)4 340 30 01

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



Meeting Organizers

General Coordination:

Vincent Lemort, Thermodynamics Laboratory (LT)

Philippe André, Department of Environmental Sciences and Management (DSGE/BEMS)

EES: Vincent Lemort, Sébastien Declaye, Samuel Gendebien, Jean-François Oudkerk (LT)

TRNSYS: Philippe André, Samuel Hennaut, Fabien Claude, Sébastien Thomas (BEMS), Roberto Ruiz (LT)

Preliminary Program

Wednesday Sept 7th - EES/TRNSYS 17

First session: 9h-10h30

General presentations of EES and TRNSYS:

Including new features in both programs.

Presentation of TRNSYS 17

Second session: 11h-12h30

Tutorial and exercises in four groups:

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

EES Beginners	Introduction to EES (how it works, fluid properties, examples)
EES Advanced	Presentation of advanced simulation models in EES (*)
TRNSYS Beginners	Weather data (reading, solar processing, shading calculations, ground temperature calculation)
TRNSYS Advanced	Multizone buildings

(*) Participants are invited to submit specific problems they would like to resolve, preferably in the field of applied thermodynamics, heat and mass transfer, combustion, refrigeration and HVAC, distributed power production.

The modeling and the simulation of the following systems are already proposed: heat exchangers, boilers, heat pumps, compressors and expanders, HVAC&R components and systems, CHP plants and organic Rankine cycles.

Lunch

Third session: 14h00-15h30

Tutorial and exercises (continued).

Fourth session: 16h-17h30

Continuation of tutorial and exercises in three groups

Thursday Sept 8th - EES/TRNSYS 17

Fifth session: 9h-10h30

Presentations made by member of the LT.

Sixth session: 11h00 -12h30

Tutorial and exercises in four groups:

EES Beginners	Selected examples already available
EES Advanced	Problems proposed by the participants (**)
TRNSYS Beginners	Introduction to Building and systems Simulation
TRNSYS Advanced	HVAC Systems Simulation

(**) Participants are also kindly invited to present a typical application they developed with EES or TRNSYS

Lunch

Seventh session: 14h00-15h30

Tutorial and exercises (continued).

Eight session: 16h-17h30

Tutorial and exercises (continued).

Friday Sept 9th – EES/TRNSYS 17

Ninth session: 9h – 11h

Tutorial and exercises (continued).

EES Beginners	Selected examples already available
EES Advanced	Problems proposed by the participants (continued)
TRNSYS Beginners	Simulation of Solar systems
TRNSYS Advanced	Selection within: <ul style="list-style-type: none"> • New components; • Connection TRNSYS-Excel; • Parametric runs; • Development of TRNSED applications; • Solar cooling applications • TRNFLOW

Tenth session : 11h30-12h30

Tutorial and exercises (continued).

Lunch

Eleventh session: 14h-15h00

Presentation and discussion of results got in previous sessions. Conclusions and perspectives.