



#### Venue

TRNSYS Days 2013 will take place at the University of Liège, Arlon Campus (Arlon, Belgium). Maps of Arlon and other information about the meeting are available on the BEMS website (<a href="www.bems.ulg.ac.be">www.bems.ulg.ac.be</a>).

## Registration fees

### Before August 31st, 2013

Three days	300 €
One day	150 €
After August 31 <sup>st</sup> , 2013	
Three days	350 €
One day	175€

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

Registration: www.bems.ulg.ac.be

### **Contacts**

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### Accommodation

Appart'City Arlon Phone : +32 63 24 23 00 Rue Zénobe Gramme, 17 Fax : +32 63 24 23 01 B-6700 Arlon Web site: www.apparcity.com

Best Western Hotel Arlux Phone : + 32 63 23 22 11
Rue de Lorraine, 54 Fax : +32 63 23 22 48
B-6700 Arlon Web site: www.bestwestern.be

Hotel du parc- Pizzéria Trulli

Avenue J-B Nothomb, 2 Phone : +32 63 21 81 79 B-6700 Arlon Fax : +32 63 22 02 06

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



# **BUILDING ENERGY MONITORING AND SIMULATION (BEMS)**

### **UNIVERSITY OF LIEGE**

## **TRNSYS Days'2013**

With training on TRNSYS 17

September 11<sup>th</sup> to 13<sup>th</sup> 2013

University of Liège

**Arlon Campus (Belgium)** 



## **Meeting Organizers**

General Coordination:

Professor Philippe André

Training team:

Philippe André, Youness Ajaji , Fabien Claude, Elisabeth Davin, Samuel Hennaut, Imane Rehab, Corinne Rogiest, Sébastien Thomas

## **Preliminary Program**

### **Wednesday September 11<sup>th</sup>**

9h00-10h30: First session

Welcome Coffee

General presentation of TRNSYS

11h00-12h30: Second session

Tutorial and exercises in three groups: beginners and advanced (Building or HVAC systems).

Beginners	TRNSYS concept, Weather data (reading, solar processing, shading calculations, ground temperature calculation), Exercises
Advanced Building	TRNSYS3D plugin use
Advanced HVAC	HVAC systems - AHU

Lunch

13h30: Visit of our laboratory building "Jacques Geelen"

*14h30-17h30: Third and Forth session*Continuation of tutorial and exercises in groups

## Thursday September 12<sup>th</sup>

9h00-10h30: Fifth session

Tutorial and exercises in groups:

Beginners	Introduction to multizone building (orientation, zones, heating & cooling, windows)  Demonstration of TRNSYS 3D plug-in
Advanced Building	Multizone building – Active layers, Coldbridges, Comfort, TRNFLOW, Windows customization
Advanced HVAC	HVAC systems - Secondary loops (cold and heat production)

11h00 -12h30: Sixth session
Tutorial and exercises (continued)

Lunch

13h30-14h00: Presentation: "Validation of TRNSYS 17 following the standard NBN EN 15265:2007"

14h00-17h30: Seventh and Eight session

Tutorial and exercises (continued).

### Friday September 13th

9h00 - 11h00: Ninth session

Tutorial and exercises (continued).

Beginners	Simulation of Solar systems	
Advanced	Choice of two sessions among six:	
Building	9.00 AM 11.00 AM	
+	Parametric Optimization runs with GenOpt	
HVAC	TRNSYS- New Matlab component connection creation	
	Photovoltaic Wind turbine	
	You have to choose one lesson at 9 AM an the other one at 11 AM.	

Lunch

14h00-15h00: Tenth session

Evaluation of the training Conclusions and perspectives Closing drink