

## **4<sup>th</sup> NECLIME Workshop on Digital Plant Distribution**

**LIÈGE, MAY 30 – 31, 2017**

**- 3<sup>rd</sup> Circular -**

Organizers: L. François, A.-J. Henrot, A.A. Bruch, T. Utescher

### ***Programme***

#### ***Monday, May 29***

*Arrival*

#### ***Tuesday, May 30***

*9:30 – 10:00*

*Registration*

*10:00 – 10:15*

*Welcome address (L. François)*

*10:15 – 12:30*

*Quantification of climate requirements of plant taxa using digital data on plant distribution – chorological resources and their quality*

- Introduction (A.K. Kern, A.A. Bruch, ca. 30 min.)*
- Round table discussion*

*12:30 – 14:00*

*Lunch break*



14:00 – 15:00

*Short presentations (5 min) on various topics (S. Akkiraz, XX etc..)*

15:00 – 15:30

*Coffee break*

15:30 – 17:30

*Sensitive climate variables in palaeoclimate reconstruction*

- *Introduction (B. Erdei, T. Utescher, ca. 30 min.)*
- *Round table discussion*

### **Wednesday, May 31**

10:00 – 12:30

*Setting up a standard for the generation of climate data sets based on digital resources – data handling and statistical procedures*

- *Introduction (A.-J. Henrot, M. Pound, ca. 30 min.)*
- *Round table discussion*

12:30 – 14:00

*Lunch break*

14:00 – 15:00

*The role of CO<sub>2</sub> in triggering climatic requirements of plants*

- *Introduction (R.A. Spicer, W. Konrad, L. Francois, ca. 30 min.)*
- *Round table discussion*

15:00 – 15:30

*Coffee break*



15:30 – 16:30

*The role of CO<sub>2</sub> in triggering climatic requirements of plants*

- *Round table discussion (continued)*

16:30 – 17:30

*Final discussion and conclusions of the meeting*

## **Thursday, June 1**

*departure*

## **Venue**

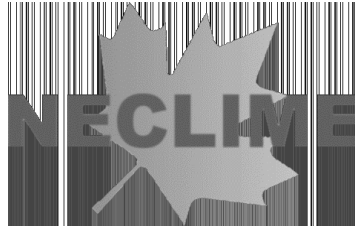
*The workshop will be held at the Institute of Physics on the Sart Tilman Campus of the University of Liège, Liège, Belgium. The room number is 4.28. The full address is:*

*Institut de Physique, Université de Liège, Building B5a, Quartier Agora, Allée du Six Août 19, Sart Tilman, 4000 Liège, Belgium*

*You can find a map of the campus here (click on “Quartier Agora” to see a detailed map of the area : [http://www.ulg.ac.be/cms/c\\_5876706/en/campus-de-liege-sart-tilman](http://www.ulg.ac.be/cms/c_5876706/en/campus-de-liege-sart-tilman)*

## **Registration**

*Each participant will have to pay 50.00 € as registration fees. These fees cover the coffee breaks and the lunches at the Jacques & Laurent University Restaurant. They will have to be paid in euros by cash. Credit cards cannot be accepted. A receipt will be provided to each registered participant.*



## **Travel**

### **Travelling to Liège**

#### By plane

*The closest airports are Brussels airport and Brussels South/Charleroi airport. The distance to Liège from both airports is about the same (100 km), but the easiest is probably to come through Brussels airport.*

*From Brussels airport, you should take a train (the train station is at the basement level -1 of the airport main building) to Brussels North Station or to Leuven, and then change train to Liège. The name of the main station in Liège is Liège-Guillemins. See: <http://www.brusselsairport.be/en/passngr/to-from-brussels-airport/train>*

*From Brussels South/Charleroi airport, you should take a bus to Charleroi South train station and then take a train to Liège-Guillemins. See: <http://www.charleroi-airport.com/en/acces/en-train-bus/index.html>*

#### By train

*There are direct fast trains (Thalys or ICE) from Cologne and Frankfurt deservng the Liège-Guillemins train station. From Paris, there are also direct fast trains (Thalys) to Liège-Guillemins. From London, you can take the Eurostar to Brussels-Midi station and then change train to Liège-Guillemins.*

### **Local transport in Liège**

*From the Liège-Guillemins station you can reach the city center by train or bus.*

*By train: you should take a train to Liège-Palais (2 stops from Liège-Guillemins). This train station is located on the main square of the city ("Place Saint-Lambert"). Your train ticket from the airport may be valid for this transfer to Liège-Palais by train.*

*By bus: there are many buses from Liège-Guillemins station to the city center. You can take bus 1, 4, 25, 48. See a map of the bus network on: [https://www.infotec.be/Portals/0/TEC%20Li%E8ge\\_Verviers/PDF/Liege\\_Centre\\_Edition2015.pdf](https://www.infotec.be/Portals/0/TEC%20Li%E8ge_Verviers/PDF/Liege_Centre_Edition2015.pdf)*

### **Reaching the conference building**

*The Institute of Physics on the Sart Tilman Campus is located about 10 km southward of the city. It can be reached by bus. From the main train station (Liège-Guillemins), you should take*



bus 48 or 58. From the city center, you should take bus 48 (Opéra, Pont d'Avroy or Charlemagne stops). When you arrive in the campus, you should get down at 'Chimie' stop with bus 58, or 'Physique' stop with bus 48. These buses are very frequent. However, you can find information on the schedules on: <https://www.infotec.be/en-us/gettingabout/schedules.aspx>

## **Accommodation**

We recommend the hotels listed below. The University has negotiated prices with these hotels. The negotiated prices are those reported. If you want us to make reservations for you in order to guarantee these prices, please send an e-mail to the executive secretary of our institute Sylvia Grandjean ([Sylvia.Grandjean@ulg.ac.be](mailto:Sylvia.Grandjean@ulg.ac.be)), referring to the NECLIME symposium organized by Louis François and Alexandra Henrot.

### **IBIS Liège**

Web site: <http://ibishotel.ibis.com/gb/hotel-0864-ibis-liege-centre-opera/index.shtml>

Single room with breakfast : 89,40 € (including taxes)

Double room with breakfast : 104,40 € (including taxes)

Wifi included in all rooms.

E-mail : [H0864@accor.com](mailto:H0864@accor.com)

Tél : +32-4-2303333

### **Pentahotel Liège**

Web site: <https://www.pentahotels.com/en/hotels/liege/everything/>

Single room with breakfast : 104,50 € (including taxes)

Twin room with breakfast : 120,50 € (including taxes)

Wifi, TV "upon request"

E-mail : [info.liège@pentahotels.com](mailto:info.liège@pentahotels.com)

Tél : +32-4-2217711

### **Le Cygne d'Argent**

Web site: <http://www.cygnedargent.be/>

Single room with breakfast : 74 € (including taxes)

Double room with breakfast : 91 € (including taxes)

Twin room with breakfast : 92 € (including taxes)

Wifi included.

E-mail : [info@cygnedargent.be](mailto:info@cygnedargent.be)

Tél : +32-4-2237001

### **Ramada Plaza Liège**

Web site: <http://ramadaplaza-liege.com/>



*Single room : 91,50 € (including taxes)*  
*Double room : 101,50 € (including taxes)*  
*Buffet breakfast and Wifi included.*  
*E-mail : [info@ramadaplaza-liege.com](mailto:info@ramadaplaza-liege.com)*  
*Tél : +32-4-2288111*

***HUSA de la Couronne***  
*(this hotel is close to the station)*  
*Web site: <http://www.hotelhusadelacouronne.be/en-gb/>*  
*Single room with breakfast : 85 € (TTC)*  
*Double room with breakfast : 95 € (TTC)*  
*Wifi included.*  
*E-mail : [info.couronne@husa.es](mailto:info.couronne@husa.es)*  
*Tél : +32-4-3403000*

### ***List of anticipated participants***

*Names followed by an asterisk correspond to participants for whom we have made a room reservation at “Le Cygne d’Argent” hotel.*

*Serkan Akkiraz (Kütahya)*

*Angela A. Bruch (Frankfurt M)*

*Marie Dury (Liège)*

*Boglárka Erdei (Budapest) (\*)*

*Louis François (Liège)*

*Alain Hambuckers (Liège)*

*Alexandra Henrot (Liège)*

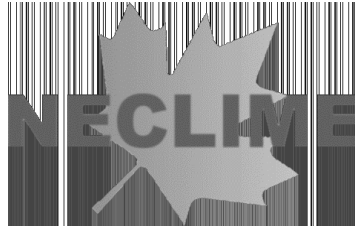
*Andrea K. Kern (São Paulo)*

*Wilfried Konrad (Tuebingen) (\*)*

*Matthew Pound (Northumbria)*

*Anita Roth-Nebelsick (Stuttgart) (\*)*

*Ulrich Salzmann (Northumbria)*



*Robert A. Spicer (Stratton Audley) (\*)*

*Teresa Spicer (Stratton Audley) (\*)*

*Christopher Traiser (Tübingen) (\*)*

*Sariye Duygu ÜÇBAŞ DURAK (Kütahya)*

*Torsten Utescher (Bonn, Frankfurt M)*

## **Key topics**

- *Quantification of climate requirements of plant taxa using digital data on plant distribution - chorological resources and their quality*

*So far, NECLIME has a large inventory of climate data of modern plants for the reconstruction of palaeoclimate, which are mainly based on analogue chorological resources. Here we will discuss how suitable different digital chorological and climatological data sets are to improve the climatic resolution and reliability of the data.*

- *Sensitive climate variables in palaeoclimate reconstruction*

*Depending on the data set chosen, different climatic parameters are available. So-called bioclimatic variables such as temperature extremes or quantifiers of duration and temperature of the growing season, on which plants may respond more sensitively, potentially are most meaningful when reconstructing palaeoclimate. Moreover, these variables play an important role in biome modelling where they are used in the physical definition of plant functional types. These variables enable a direct comparison of model and proxy-based biome reconstructions. We will discuss the significance of different climatic parameters for palaeoclimate analyses and define a set of preferred parameters for future studies.*

- *Setting up a standard for the generation of climate data sets based on digital resources – data handling and statistical procedures*

*This topic will focus on statistical procedures regarding the numerical treatment of grid cells within a plant distribution area. Which algorithms can be used in areas with high altitude / steep topography in order to minimize unwelcome bias introduced by microclimates? How useful are density functions for plant occurrences in their distribution area including the application of basic statistics (e.g., quantiles)?*



– *The role of CO<sub>2</sub> in triggering climatic requirements of plants*

*The role of CO<sub>2</sub> in palaeoclimate reconstructions was already discussed on the 3rd NECLIME workshop on digital plant distribution, held in Stratton Audley, UK, in 2014. Based on this it was concluded that palaeoclimate reconstructions for time-spans with high atmospheric CO<sub>2</sub> might be biased, mainly with respect to palaeo-precipitation. Here we would like to discuss intended studies including proxy data interpretations and modelling to substantiate this assumption.*