

## Scientific objectives

From the 6th to the 3rd millennium BC, the Neolithic corresponds to a vast stream of innovations that have affected human societies in temperate Europe. The study of the material culture of these Neolithic populations reveals the existence of very extensive exchange networks. The latter are particularly visible through the sphere of lithic productions. However, the recognition of the circulation of siliceous products is closely related to advances in the characterization of raw materials on the one hand, and technological studies on the other. The study of the networks for the diffusion of raw materials therefore contributes to highlighting the mobility and connectivity of agro-pastoral communities during the Neolithic. The triptych (identification of raw materials/technological analysis/confrontation with theoretical data and modelling) constitutes a rapidly expanding research dynamic for a detailed understanding of the socio-economic organization of Neolithic populations. However, while diffusion networks transcend our national borders, there is currently no cross-border academic training. This project of scientific events for young researchers therefore aims at developing international standards for the analysis of lithic assemblages and at promoting exchange and collaboration beyond the national borders of the area concerned. These standards will be based on the development of commonly agreed criteria creating a *modus operandi* for the description and analysis of raw materials and technological characteristics. With this in mind, we will seek to pool the highly complementary specific scientific expertise of each of the three institutions involved in this project. In addition, we hope, that the young researchers will also benefit from the intergenerational transmission of this complementary knowledge, since experienced and international renowned experts will take part in the projected workshops.

**Language:** The manifestations will be in English. Help can be provided in French and German.

**Registrations:** The proposed Scientific Events will be open to all young researchers from Master to postdoctoral fellows and current researchers. Travel and accommodation costs can be partly funded by the project (24 participants at a max). The selection of participants will be based on a short letter of motivation. Please note that applications for all 3 events will be given priority. Call for applications closes on **20th January 2019**. Letters must either be sent to [solene.denis@unamur.be](mailto:solene.denis@unamur.be) or can be completed on the websites (form).

## Organisation Committee

Solène DENIS, Silviane SCHARL and Jean-Philippe COLLIN (project holders), with Pierre ALLARD, Laurence BURNEZ-LANOTTE, Ingrid KOCH and Daniel SCHYLE

## Speakers

*Pierre Allard*, Researcher, CNRS, UMR 7055

*Heba Al Sakhel*, temporary Researcher, CNRS, UMR 7055

*Françoise Bostyn*, Research Engineer, INRAP, UMR 8215

*Laurence Burnez-Lanotte*, Professor, Unamur, LIATEC, UMR 8215

*Jean-Philippe Collin*, PhD Student, Unamur, LIATEC, Paris 1 Panthéon Sorbonne University, UMR 8215

*Erich Claßen*, Director, LVR-State Service for Archaeological Heritage

*Vincent Delvigne*, postdoctoral Researcher, Liège University, Bordeaux University, UMR 5199

*Solène Denis*, postdoctoral Researcher, Unamur, LIATEC, UMR 7055

*Géraldine Fiers*, PhD Student, Ughent

*Marjorie de Grooth*, Researcher, retired curator of the archaeological department, Bonnefantenmuseum, Maastricht

*Birgit Gehlen*, postdoctoral Researcher, Institute of Prehistoric Archaeology, Cologne University

*Ingrid Koch*, independent Researcher, affiliated to the Institute of Prehistoric Archaeology, Cologne University

*Jacques Pelegrin*, Research Director, CNRS, UMR 7055

*Georg Roth*, postdoctoral Researcher, Institute of Prehistoric Archaeology, Free University Berlin

*Silviane Scharl*, Professor, Institute of Prehistoric Archaeology, Cologne University

*Daniel Schyle*, Researcher, Neanderthal Museum and Institute of Prehistoric Archaeology, Cologne University

*Hans Vandendriessche*, PhD Student, Ughent

*Andreas Zimmermann*, Professor em., Institute of Prehistoric Archaeology, Cologne University



WEBSITE



## INTERNATIONAL STANDARDS FOR THE TECHNO-ECONOMIC STUDY OF LITHIC PRODUCTIONS IN THE NEOLITHIC PERIOD

Scientific Events for Young Researchers of the Franco-German University

LIATEC, Namur University  
CNRS, UMR 7055 Prehistory and Technology  
Institute of Prehistoric Archaeology, Cologne University

CONTACT and INFORMATIONS :  
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<https://www.unamur.be/liatec/neolithic>

### ORGANISATION:

Solène DENIS, Silviane SCHARL and Jean-Philippe COLLIN, with Pierre ALLARD, Laurence BURNEZ-LANOTTE, Ingrid KOCH and Daniel SCHYLE

## Event 1: New methods for raw material analysis and application in Benelux/North Rhine-Westphalia

University of Namur, 21-23rd March

### Thursday March 21th

**13:00** Introduction speech: the need for common standards, *Silviane Scharl, Solène Denis and Jean-Philippe Collin*

**13:15** The raw material reference collections in the near future: The GDR SILEX project in France, *Pierre Allard, Françoise Bostyn, Jean-Philippe Collin and Vincent Delvigne*

**14:00** New methods for characterizing siliceous raw materials, *Vincent Delvigne and Jean-Philippe Collin*

**15:15** New methods for characterizing siliceous raw materials: which tools for the constitution of a common reference collections on the field? Standardization of descriptive criteria. *Workshop*

**16:30** New methods for characterizing siliceous raw materials: definition of common standards for raw materials analysis. *Workshop*

### Friday March 22nd

**09:00** The main raw materials that spread in the Neolithic period from northern France to the North Rhine. Objective: to point out the convergence of facies and identify the limits to the restitution of diffusion networks, *Pierre Allard, Françoise Bostyn, Laurence Burnez-Lanotte, Jean-Philippe Collin, Solène Denis, Géraldine Fiers, Marjorie de Grooth, Ingrid Koch, Daniel Schyle, Hans Vandendriessche*

**11:30** The main raw materials that spread in the Neolithic period from northern France to the North Rhine. Sample observations in macro-, meso- and microscopy, practical exercise and use of common standards. *Workshop*

**14:30** Synthesis of the current vernacular designations of siliceous raw materials: what do they correspond to? how to get out of the confusion by proposing new naming tools? *Brainstorming*

**15:15** The potential of a lithostratigraphic approach as a common reference framework for Benelux-NRW, *Jean-Philippe Collin and Marjorie de Grooth*

**16:00** The potential of a lithostratigraphic approach as

a common reference framework: sample observations in macro-, meso- and microscopy, practical exercise and use of common standards. *Workshop*

### Saturday March 23rd

**09:30** The research to be developed for the Benelux and North Rhine-Westphalia: state of the art, perspectives, expectations of each and preparation of future projects. Inventory of existing lithothecas, what is their content and the nature of the information. What projects could standardize, enrich and disseminate the information of these lithothecas? What are the possible sources of funding? *Brainstorming*

**13:00** Debriefing of the event: impressions and perspectives

## Event 2: Lithic technology: principles of analysis and application on Neolithic industries

Maison de l'Archéologie et de l'Ethnologie, UMR 7055, Nanterre, 25-27th June 2019

### Tuesday June 25th

**13:30** Introduction speech: the need for common standards, *Silviane Scharl, Solène Denis and Jean-Philippe Collin*

**13:45** The principles of technological analysis of prehistoric lithic industries, *Jacques Pelegrin*

### Wednesday June 26th

**09:30** The technological reference collection ("Technothèque"): constitution, vocabulary and manipulations, *Heba Al Sakhel*

**11:30** The German tradition of research on lithic industries: method and vocabulary, *Birgit Gehlen, Ingrid Koch, Silviane Scharl, Daniel Schyle*

**14:15** Lithic Technology of Linear Pottery Culture Populations, *Pierre Allard*

**15:30** Definition of common standards, identification and translation of conceptual gaps. *Workshop*

### Thursday June 27th

**09:30** Lithic Technology of Post-Linear Pottery Culture

Populations, *Françoise Bostyn and Solène Denis*

**11:00** Practical exercise: technological sorting of an archaeological collection and use of common standards, *Workshop*

**14:00** Practical exercise: technological sorting of an archaeological collection and use of common standards, *Workshop*

**15:00** Assessment, impressions and perspectives on this second Scientific Event

## Event 3: Quantitative analysis and theoretical approaches

Institute of Prehistoric Archaeology, Cologne University, 9-10th September

### Monday September 9th

**13:00** Introduction speech: the need for common standards, *Silviane Scharl, Solène Denis and Jean-Philippe Collin*

**13:15** The SAP-system – data entry, technological analysis and economic interpretation, *Birgit Gehlen and Andreas Zimmermann*

**14:30** The French tradition of research on lithic industries: method and vocabulary, *Solène Denis and Jean-Philippe Collin*

**15:30** Quantitative analysis of lithic assemblages – Iso-lines and questions of lithic raw material distribution, *Georg Roth*

**17:00** Quantitative analysis – Network analysis, *Erich Claßen*

### Tuesday September 10th

**09:00** Lousberg adzes as a proxy for late Neolithic (3500-2900 BC) population density, *Daniel Schyle*

**10:00** Analysing lithic exchange networks during the Early Neolithic in Central Europe (5300-4500 BC), *Georg Roth, Silviane Scharl and Andreas Zimmermann*

**11:30** Assessment, impressions and perspectives on this third Scientific Event, future developments

**13:30** Trip to the Lousberg Flint Mine/Aachen, *Daniel Schyle*