

International symposium

Modeling the Past to Anticipate the Future

December 4-5, 2025 Auditorium Coubertin (1 rue Jean Calvin 75005 Paris)

Call for communications and posters

(French below)

Since the mid-20th century, data modeling has been among the tools available to researchers in the humanities and social sciences, enabling a deeper understanding of societies, environments and complex phenomena. With the exponential growth of computing and its integration into our disciplines, models have become essential heuristic tools, taking various forms (including statistical and spatial models, multi-agent simulations, prosopography...). This symposium aims to be both interdisciplinary and diachronic, exploring the development and application of models from multiple perspectives. By bringing together **archaeologists**, as well as **geographers, historians, anthropologists, architects, and heritage conservators**, it seeks to foster discussions on our respective practices and research in modeling the past, present and future projections.

Whether addressing a recent or distant past, modeling enhances our understanding of the future and contributes to finding solutions to major global challenges facing humanity, whether social, heritage-related, or environmental. This symposium aims to examine the vernacular knowledge of different societies across various chrono-cultural areas, by fostering dialogue between specialists from diverse disciplines and temporalities.

By employing techniques such as network analysis, graph theory, Bayesian approaches, multiagent simulation, ontological models, as well as remote sensing and artificial intelligence, this symposium also aims to reflect on how these models are designed and used, while exploring future methodological perspectives for our disciplines.

This space for exchange will feature thematic sessions where data modeling will be addressed in connection with the challenges of the <u>EUR ArChal</u>. The sessions will be defined based on submitted proposals, which must be in line with the following **thematic axes**:

• Modeling Environmental and Heritage Risks (and their solutions)

This theme examines the study of the environment and its management by past societies, as well as its connection to contemporary issues related to climate change, ecosystem preservation and endangered heritage. How do historical modeling tools allow us to explore past solutions that could be applied to current global threats (conflicts, urbanization, deforestation, etc.)? Is it possible to identify vulnerabilities and propose predictive models for future scenarios? Conversely, how can analytical tools applied to modern issues be used to study ancient phenomena?

• Modeling Human Relations and Social Structures

The aim of this theme is to study the dynamics of power, social networks and social structures. By employing data modeling approaches such as *Social Network Analysis*, economic modeling, and prosopography, the goal is to analyze the interactions between individuals and different social groups in their horizontal and vertical dimensions. How can these different types of human interactions be modeled to identify power relations, economic relationships, inequalities, and practices of sociability?

• Modeling Mobility, Flows and Circulations

Modeling the flows of objects, individuals, techniques, and ideas helps to better reconstruct past networks and analyze their interactions. By applying various approaches (such as spatial analysis, network geography and movement simulations), it becomes possible to understand large-scale cultural and economic exchanges, as well as circulation systems with their continuities and disruptions. In an era of intensified flows, how can past mobility patterns help us to study exchanges and displacements driven by globalization? How do major societal disruptions, such as conflicts or climate variations, impact both past and present mobility patterns?

• From Materiality to Dematerialization

This theme explores the processes of creation, transformation and use of objects and built environments in the past. By fostering a dialogue between the materiality of artifacts (material properties, *chaînes opératoires*, technical innovations) and dematerialization through models and various analytical methods (simulations based on 3D models, artificial intelligence, etc.), it investigates how new data can be obtained from previously studied or recently discovered elements. What are the current methodological and technological opportunities and perspectives that offer new ways of interpreting our object of study?

This symposium is open to master's students, doctoral candidates, and professionals in the research community. Oral presentations should not exceed 20 minutes and will be followed by a 10-minute Q&A session. **Presentations may be given in either French or English**, with supporting materials in the other language. Posters may also be submitted in one of these two languages as part of a dedicated session. **The symposium will be held in a hybrid format**. The contributions will later be published in a special issue of the journal *Archeologia e Calcolatori* in English, French, or Italian.

Please download and complete the proposal submission form and return it in **Word format** to the following address: <u>colloquemodelisation@gmail.com</u>, specifying whether it is an oral

communication or poster proposal. When doing this, please rename your file according to the following format: ColloqueModelisationEUR_LastName_poster/communication

The submission deadline is Monday, June 30 2025, at 23:59

Organizing Committee

Aura Fossati (Université Paris 1 Panthéon-Sorbonne, EUR ArChal, UMR 8096 ArchAm) Théo Mespoulet (Université Paris 1 Panthéon-Sorbonne, EUR ArChal, UMR 7041 ArScAn -VEPMO)

Alexandre Valette (Université Paris 1 Panthéon-Sorbonne, EUR ArChal, UMR 7041 ArScAn - Protohistoire égéenne)

Scientific Committee (*in alphabetical order*)

Marc Bui (Professor of Computer Science, Université Paris 8, UMR 8546 AOrOc, École Pratique des Hautes Études)

Edwige Dubos-Paillard (Professor of Geography, Université Paris 1 Panthéon-Sorbonne, UMR 8504 Géographie-cités)

Andrea Gaucci (Associate Professor in Archaeology, Università di Bologna)

François Giligny (Professor of Archaeological Methods and Theory, Université Paris 1 Panthéon-Sorbonne, UMR 8215 Trajectoires)

Delphine Grancher (Research Engineer in Geography, CNRS, UMR 8591 LGP)

Francesco Iacono (Associate Professor in Prehistory, Università di Bologna)

Paola Moscati (Former Research Director, Consiglio Nazionale delle Ricerche)

Haris Procopiou (Professor of Aegean Prehistory, Université Paris 1 Panthéon-Sorbonne, UMR 7041 ArScAn)

Julien Schuh (Professor of French Literature, Université Paris-Nanterre, CSLF)

Provisional Schedule

- May-June 2025: call for communications;
- June 30, 2025: submission deadline;
- July 2025: program preparation;
- September-October 2025: publication of the final program;
- December 4-5, 2025: symposium *Modeling the Past to Anticipate the Future*.

For any questions, feel free to contact us at: colloquemodelisation@gmail.com

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Modeling the Past to Anticipate the Future

December 4-5, 2025 Centre de Conférence Coubertin (Paris)

Call for communications and posters APPLICATION FORM

Name:First name:Email Address:Position and contact information of the author(s):

Proposal for:

 \Box communication \Box poster \Box either communication or poster (no preference)

Title of the proposed communication or poster (in French and English).

Abstract (in French or English – **maximum 400 words**) including: presentation of the subject, methodology, and results obtained or expected.

List of 4 to 6 keywords (in French and English).

To ensure your proposal is considered, please send this completed document in **Word format** to <u>colloquemodelisation@gmail.com</u>