



# LaScArBx

Bordeaux Archaeological Sciences Cluster



université  
de BORDEAUX





**A university's strength partly comes through its research, the creation of knowledge that can then be passed on and disseminated.**

## Preparing the future

Higher education and research are the levers of new intelligent growth that is both sustainable and inclusive. This involves preparing a knowledge society that future generations will flourish in.

The University of Bordeaux and its partners intend to respond to this challenge by developing a campus of excellence with international influence, joining research forces around high-level scientific pillars:

- neuroscience,
- medical imaging,
- cardiology,
- public health,
- materials of the future,
- environment,
- archaeology,
- laser optics,
- digital technologies.

These priorities reflect the research strengths of the Bordeaux site whose excellence is clearly recognised in terms of the standards applicable to the discipline and its high international profile.

Certifications by the French national "Investments for the Future" scheme in 2011 have strengthened this dynamic of ambitious multidisciplinary projects. Today, these centres of excellence backed by innovative training offer great prospects for development, French research and the socio-economic world.

The quest for excellence is thus at the heart of the development policy of the Bordeaux site. Through this remarkable dynamic, the University of Bordeaux intends to provide solutions to the challenges of our environment and pave the way for the society of tomorrow.

Bordeaux Archaeological Sciences Cluster (LaScArBx) studies the relationship between man and the space around him, and particularly the different processes for the appropriation of this space by ancient societies, from Prehistory to the late Middle Ages. A true melting pot: LaScArBx draws on a wide range of disciplines and skills, unique in France.

# Bordeaux Archaeological Sciences Cluster

The Bordeaux Archaeological Sciences Cluster is an interdisciplinary research program that dovetails the complementary skills of three laboratories on the Bordeaux site, working in the field of archaeology but extended to include a broad range of disciplines: historical sciences, material sciences, life sciences, earth science, digital humanities. This cluster of excellence, unique in France and Europe, closely links research with economic, societal and heritage development.

## → Key figures

**4 authorities:** University of Bordeaux, University Bordeaux Montaigne, CNRS, Ministry of Culture and Communication

**3 research laboratories:** AUSONIUS, IRAMAT-CRP2A and PACEA

**300** researchers, research-professors, engineers, technicians and administrative staff

**14 internationally recognized experts,** members of the Scientific Council

a budget of **€12 M**

**9** calls for projects

**8** chairs (junior and senior)

**9** expert engineers

**10** PhD contracts

**10** post-doctoral contracts

## Governance

### Executive Board:

> a coordinator: Valérie Fromentin (University Professor)

> the Directors of the three laboratories involved: Jérôme France (University Professor, AUSONIUS), Anne Delagnes (Director of Research, CNRS, PACEA) and Rémy Chapoulie (University Professor, IRAMAT-CRP2A)

> an external expert: Nathalie Fourment (Regional Archaeology Curator)

### Steering Committee:

composed of the Executive Board and 16 representatives from the three laboratories, it has an operational role: it is particularly involved in the procedures for internal calls for projects.

### International Scientific Council:

composed of 14 national and international experts, it assesses and guides research strategy.

### Support team:

> a Project Manager:

Sylvie Maleret

> a Communication/Valorisation Manager:

Catherine de Noter

# program Objectives

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## → Missions

- > **Remove the barriers** between academic programs, **unite** the community
- > **Attract young talents**, open the training courses offered by the Cluster **internationally**, promote professional integration
- > Keep the Cluster **visible and attractive**, communicate the specific qualities of the Cluster and its **unique position** in the world of archaeology
- > **Share knowledge** with society, transfer expertise from the Cluster to the State and local authorities, contribute to cultural tourism

## → The study of human societies over a long time scale

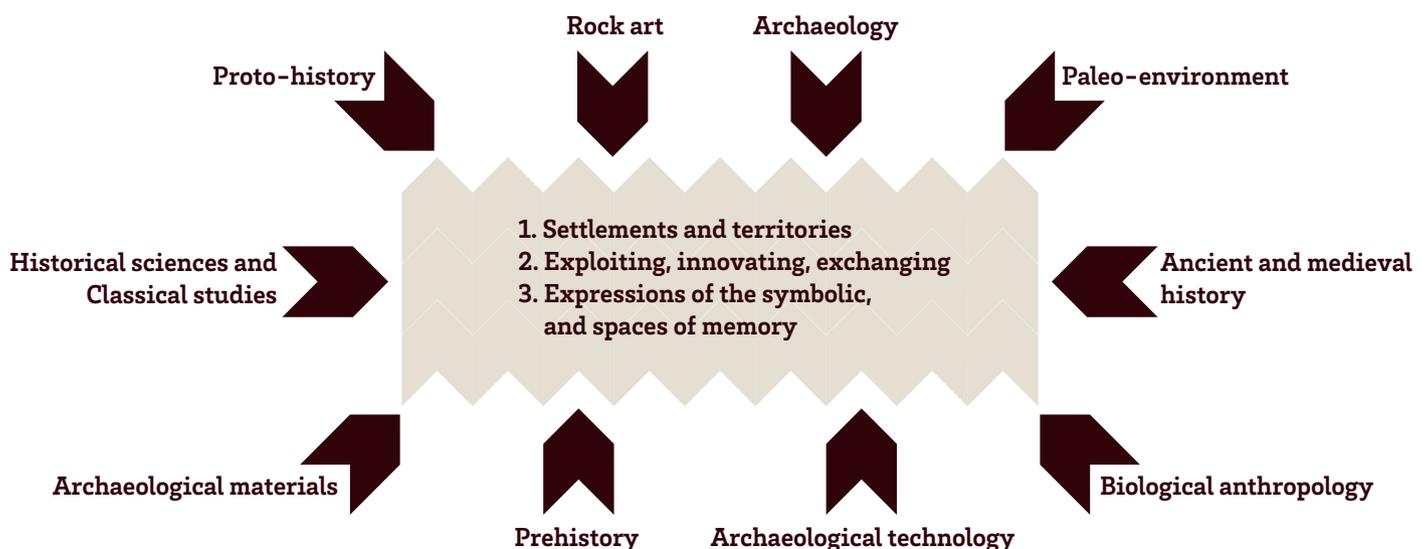
Entitled “*Use of the world in ancient societies: processes and forms of appropriation of space over long time*”, the theme of LaScArBx’s research is focused on the idea of “*anthropized space*”.

Life in societies of the past is considered from three perspectives - biological, environmental and cultural - at a scale of several thousand years (from Prehistory up to sub-contemporary periods).

This theme looks at the interactions between man and his environment and is divided into three areas:

1. Settlements and territories
2. Exploiting, innovating, exchanging
3. Expressions of the symbolic and compass of memory

This research draws from a broad spectrum of Archaeological Sciences:



# a multidisciplinary community

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**AUSONIUS (Research institute of Antiquity and the Middle Ages)**  
Joint Research Unit 5607 CNRS-University of Bordeaux Montaigne



**IRAMAT-CRP2A (Research Institute for Archaeological materials  
Research Centre for Applied Physics in Archaeology)**  
Joint Research Unit 5060 CNRS-University of Bordeaux Montaigne



**PACEA (From Prehistory to Modern Day: Culture, Environment and Anthropology)**  
Joint Research Unit 5199 CNRS-University of Bordeaux-Ministry  
of Culture and Communication.

## → **A task force unparalleled in France and Europe**

The members of the three research laboratories represent **300 full time jobs**. The scientific and operational partner structures in Aquitaine (Inrap, DRAC, Regional archaeological service, Preventive archaeological service of Bordeaux Métropole, Hadès and Archéosphère) employ nearly 600 people.

This community can rely on a unique concentration of **technological platforms**:

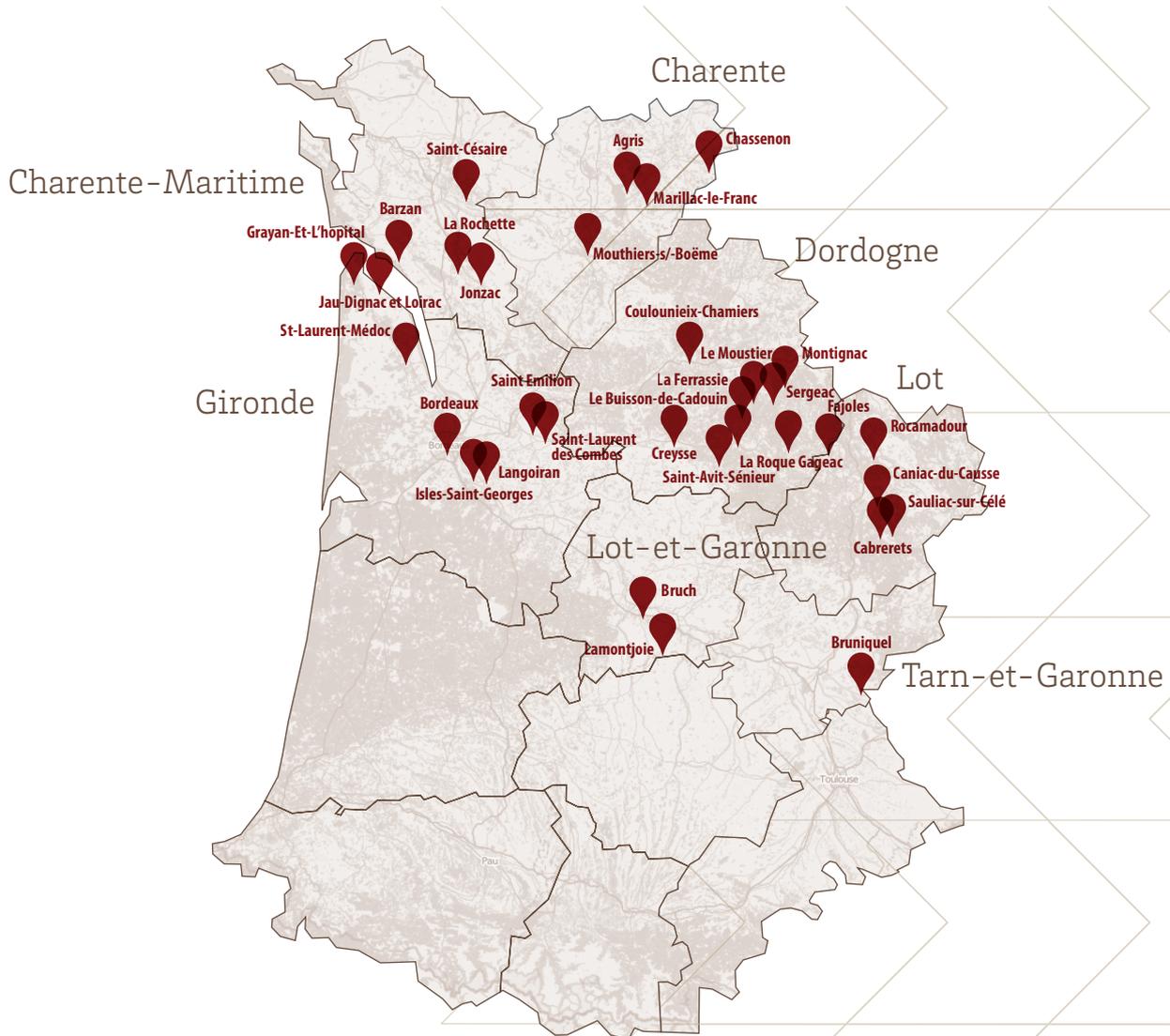
- > A Paleogenetics Platform
- > Unit for dating and the analysis of archaeological materials
- > Technical centres for radiology, sedimentology, ceramography
- > *Ostéothèque, Céramothèque* (Centres for the storage of bone and ceramic collections)



Bordeaux Archaeological Sciences Cluster also owns documentary and bibliographical resources that are unique in France and Europe (Robert Etienne Research Library) and a publishing service (Ausonius Editions).

# Solid regional roots...

Aquitaine, a hot spot of culture and history, is home to exceptional cultural and material heritage. The region therefore offers up a rich field of study for the various Cluster teams.



## Support from local institutions

The teams interact with the regional Archaeology Services (Aquitaine, Midi-Pyrénées and Poitou-Charentes) and for several years have benefited from the financial support of the Aquitaine Regional Government and the Aquitaine departments.

# ... and a strong international involvement

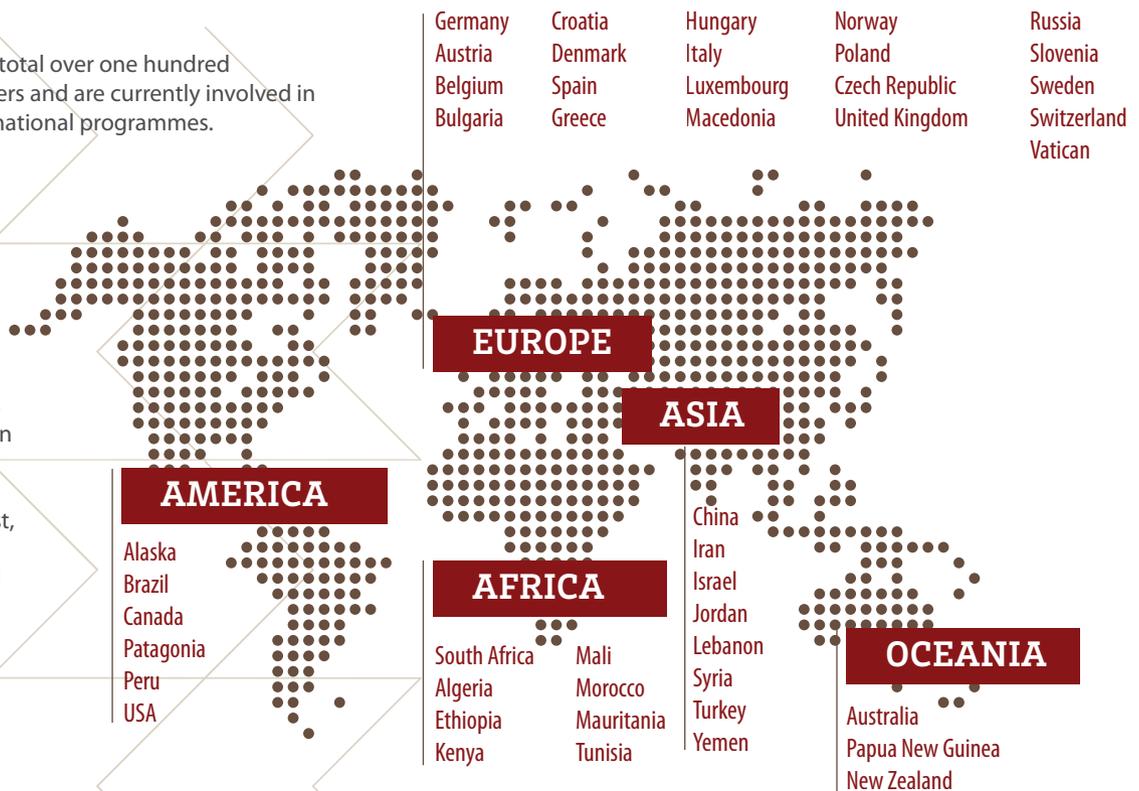
The Cluster has not only developed strong partnerships with prestigious universities and institutions the world over, but is also directly involved in cooperation with local teams.

## Partnerships

The Cluster teams total over one hundred institutional partners and are currently involved in around forty international programmes.

## Field operations

Their activities span the 5 continents (Europe, Africa, Middle and Far East, South America, the Caribbean and Oceania).



## Christelle Lahaye, Senior lecturer



Christelle Lahaye, geochronologist, works primarily on dating at archaeological sites. She participates in numerous operations in the field, sometimes as the director or co-directeur, in the greater South Western region of France, and also in the Americas (Brazil, Alaska). Her research focuses on understanding socio-cultural behaviours, particularly the Neanderthals (NéMo project) in Europe, and on the first settlements on the American continent. Essential for acquiring samples and measurements *in situ* for dating purposes, this fieldwork allows her to grasp archaeological issues and understand the dynamics of the taphonomy of the sites, which is essential information in the choice of samples to be dated. These research projects are conducted in partnership with several French and international teams and benefit from financial support from LaScArBx.

# Excellence in training

## affiliated with the Cluster

Several master's level archaeology training programs are provided through three teams that are part of the Cluster. The programs cover a variety of periods and disciplines and have **no equivalent in France** or indeed Europe.

### → Research Masters

- > Master's in **Biological Anthropology - Prehistory** with PACEA laboratory
- > Master's in **Sciences of Antiquity and the Middle Ages** with Institut AUSONIUS
- > Master's in **Cultural Heritage Materials and Archaeometry** through IRAMAT-CRP2A

### → Professional Masters

- > Master's in **Design, management and promoting archaeological operations** with Institut AUSONIUS
- > Master's in **Management of works and mediation of Architecture and Cultural Heritage** with IRAMAT-CRP2A



### PERIODS

Covers all periods, from Prehistory to the Middle Ages.



### DISCIPLINES

Textual science  
**Medieval archaeology and history**  
 Building archaeology Epigraphy Digital Humanities  
**3D Imaging Ancient history Prehistory**  
 Geographic information systems  
 Taphonomy **Palaeoenvironments**  
 Biological Anthropology Archaeometry  
 Classical archaeology **Use-wear analysis**  
**Paleogenetics** Protohistory  
 Rock art **Geology**



### INTERNATIONAL

Involvement of foreign professors, both associates and visiting; stimulating the mobility of incoming and outgoing students.

### Strong integration rates

**Partnerships with potential employers** and the participation of key archaeological players in the training programs enhances young graduates' chances of employment.

**100% of students who obtained** a Master's in Design, management, and promoting archaeological operations were integrated into the workforce.

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### **Tiphaine Maurin, PhD student with the Cluster**

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With her Master's in Archeometry and Master's in Biological Anthropology - Prehistory affiliated with the PACEA laboratory, Tiphaine Maurin is currently pursuing her PhD with the University of Bordeaux. During a trip to Ethiopia in 2010 as a civilian volunteer, she met Anne Delagnes (PACEA) and Jean-Renaud Boisserie (Iphep - CNRS University of Poitiers) who were carrying out a mission in the Omo Valley to study the geo-archaeological formation of Shungura. This meeting inspired her thesis project, which looked at human settlements, bio-environmental factors and the emergence of ancient material cultures in the Omo Valley. In addition to Tiphaine's PhD contract, the Cluster also financed the purchase of materials for missions, including a robotic total station, enabling her to make more efficient use of her time spent in the field.

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### **Marie-Pierre Chaufray, Junior Chair with the Cluster**

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Specialist in Greek and Egyptian papyrology, Marie-Pierre Chaufray became a Cluster Junior Chair in September 2013. Papyrology, which provides access to textual sources written in several ancient languages (Greek, Demotic, Coptic, Latin...), seeks to understand the civilisations of Antiquity. Developing this discipline, which is little taught in France, within the Ausonius laboratory had led to ground-breaking collaborations within the Cluster and will perhaps stir new vocations among young researchers.

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### **Christopher Knüsel, Professor of Biological Anthropology at the University of Bordeaux**

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After earning his doctorate at the Simon Fraser University in Canada, he joined the University of Bradford as a post-doctoral student, and then a Senior Lecturer in Bioarchaeology and taught human osteology and paleopathology. In 2008 he entered the University of Exeter, where he created and led the Master's in Bioarchaeology. He joined the PACEA laboratory in 2014 and assumed the position of Professor of Biological Anthropology at the University of Bordeaux after being a member of the international scientific council of the Bordeaux Archaeological Sciences Cluster.

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# Ensuring the future of the past

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Archaeology brings the depth of time to any kind of thinking on human history and the future of societies. It raises questions about the past to answer those of the future. Research on man's evolution, his current and past biological diversity, his relationship with his environment through mental images, his residential strategies and the creation of networks for exchanges could provide answers to important societal questions, questions which have become all the more critical since, for the first time in mankind's history, our activity has an impact on the climate. Whereas the increased speed of innovation sometimes catches the political authorities off-guard, expertise based on the long term can prove to be valuable, and provides the possibility of taking the step back that is necessary for engaging in discussions.

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*Palais Gallien in Bordeaux*



*Archéopôle d'Aquitaine, University of Bordeaux Montaigne*

## **A mission to disseminate scientific culture**

The LaScArBx research teams are dedicated to spreading scientific knowledge throughout society, and particularly among young people who need points of reference in terms of time, history and conceptual tools in order to understand the world they live in. The Cluster can rely in particular on the Archéopôle d'Aquitaine, an interpretation and dissemination venue, as well as Ausonius Editions.

## **Archaeology, a key component of the regional economy**

The Bordeaux Archaeological Sciences Cluster is committed to several operations for heritage promotion of tourism sites in Aquitaine (Bordeaux, jurisdiction of Saint-Emilion, prehistoric sites of the Vézère valley between Montignac and Le Bugue), which are drivers of the regional economy and directly create work for a dense fabric of retail outlets and SMEs.

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### **Frédéric Boutoulle, Professor of Medieval History and leader of the “Online Gascon Roles” project**

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The “Gascon Roles” project, supported by LaScArBx, contributed to the online editing and encoding of 20,000 texts from 144 roles of parchment. This unique source of information documents a broad range of subjects: the relations between England and Aquitaine, the impacts of the Hundred Years’ War on local populations, the administrative and financial control exercised by the English Crown, and also the geneology of local populations. This project, which was born of the exemplary cooperation between researchers from England and Bordeaux, is a starting point for other large-scale research projects in France and England, including a collective research program on Saint-Emilion and its jurisdiction. Located in a territory registered as a UNESCO World Heritage site that welcomes roughly 1,000,000 tourists per year, this programme benefits from strong local support and sponsors, including wine chateaux.

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### **Sonia Syllac, in charge of reception and scientific mediation at Archéopôle d’Aquitaine**

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After working for 6 months in a work placement for the research program at the Palais Gallien in Bordeaux, Sonia Syllac is now in charge of running the space dedicated to receiving the public at Archéopôle d’Aquitaine. Sonia has implemented several mediation projects, in particular educational workshops adapted for secondary school children. She is also involved in designing exhibitions that connect the research world with non-specialist audiences, particularly in the context of the Bordeaux Archaeological Sciences Cluster program.

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### **“Archeological Sciences the future of past” exhibition at the Archéopôle d’Aquitaine**

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In order to share and promote the results of projects developed under the Investments for the Future Scheme, the Archaeological Sciences Cluster has set up an exhibition. This exhibition, intended for Cluster partners and the general public, is on display at the Archéopôle d’Aquitaine.

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# LaScArBx

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**For more information**

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