



2023 lecture series on

# construction history

**Alessandro Pierattini**

*The invention of the crane*

February 16, 4 pm

**Fabrizio Sommaini**

*Rome was not built in a day. The construction process of the Roman Imperial Palace*

February 23, 4 pm

**Stefan Holzer**

*Early Modern construction techniques.  
How to build a vault*

March 30, 4 pm

**James Campbell**

*Building St Paul's*

April 20, 4 pm

**Philippe Sosnowska**

*Guided tour: Brussels' City Hall*

May 4, 1 & 3 pm

This lecture series is organised in the framework of the course 'Architectural and Construction History (before 1850)' by Stephanie Van de Voorde. For more information, contact: [stephanie.van.de.voorde@vub.be](mailto:stephanie.van.de.voorde@vub.be).

The first 4 lectures will be hybrid, via MS Teams. Register [here](#) at least 2 days before each lecture to receive the link.



Blocks from Isthmia temple. (c) Alessandro Pierattini

## 2023 CHsB lecture series on construction history

### **The invention of the crane**

The invention of the crane is among the most remarkable Greek contributions to the history of construction. Prof. Pierattini will talk about when and how ancient Greeks started to use cranes to construct temples, based on the grooves observed on the first stone blocks of Greek architecture.

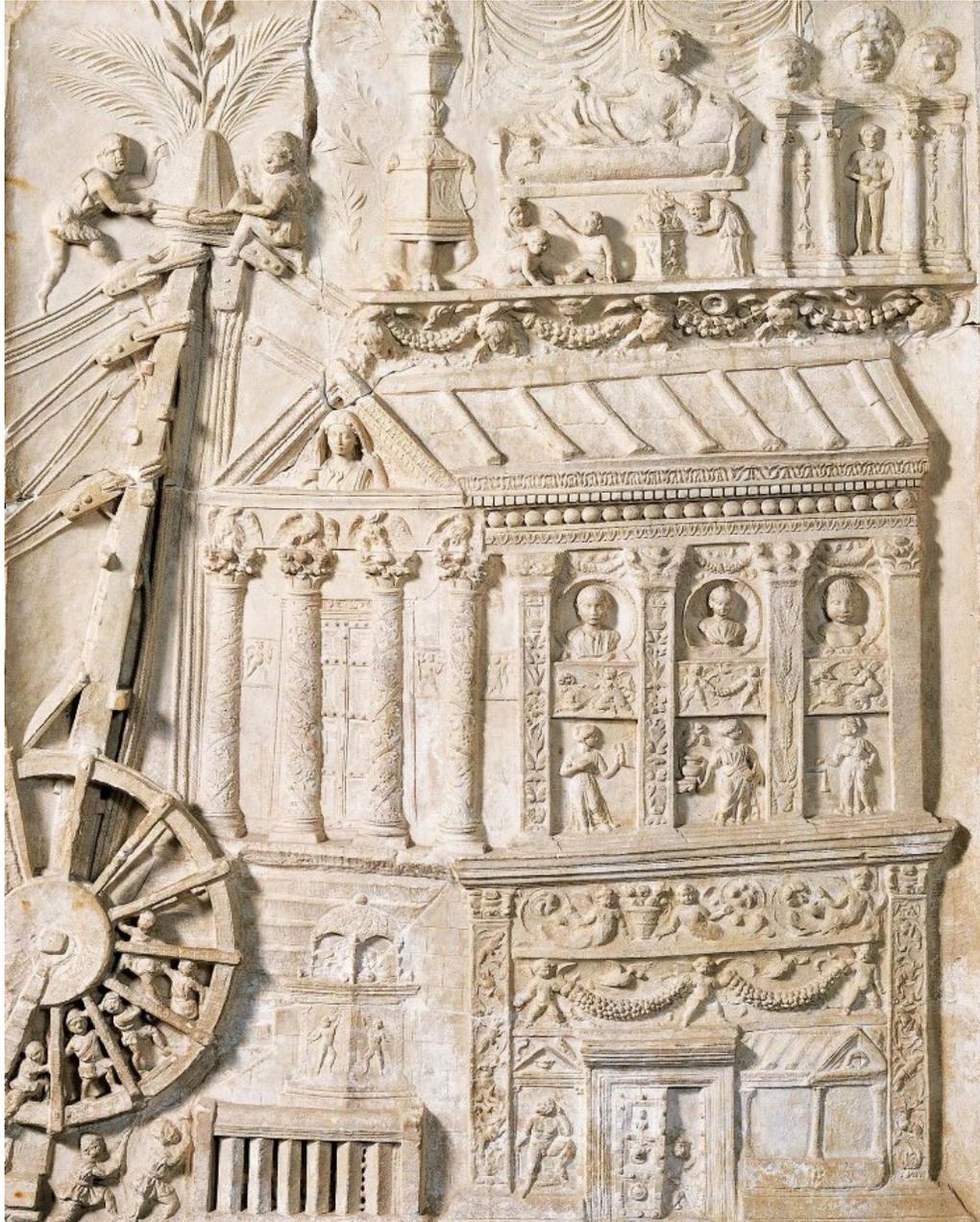
### **Alessandro Pierattini**

Alessandro Pierattini is Assistant Professor at the University of Notre Dame (Indiana, US). As an architectural historian (Ph.D., La Sapienza University, Rome), his field of expertise is Greek and Roman architecture. He is the author of the recent monograph *The Origins of Greek Temple Architecture* (2022, Cambridge University Press).

### **Thursday February 16, 4 pm (CET)**

The lecture will be hybrid, via MS Teams. Please register [here](#) 2 days beforehand. You will receive the link the day before.

This lecture series is organised in the framework of the course 'Architectural and Construction History (before 1850)' by Stephanie Van de Voorde, for bachelor students in Architectural Engineering and master students in Urban Studies (VUB and ULB). For more information.: [stephanie.van.de.voorde@vub.be](mailto:stephanie.van.de.voorde@vub.be) or [vub.be/arch](http://vub.be/arch).



A lifting machine of great power, with a motor wheel worked by five men, from the funerary relief of the family Haterii, in the reign of Domitian (Lateran Collections, Vatican Museum). From J. P. Adam, *Roman Building: Materials and Techniques* (London - New York 1994), p. 75

## 2023 CHsB lecture series on construction history

### **Rome was not built in a day. The construction process of the Roman Imperial Palace (1st century CE)**

On the Palatine Hill in Rome was the residence of Emperor Domitian, the palace par excellence. How did the Romans build one of the most monumental structures in Western history? Tracing the history of construction and quantifying the human and material resources reveal the remarkable degree of specialization, capacity, and technology of the Roman building industry.

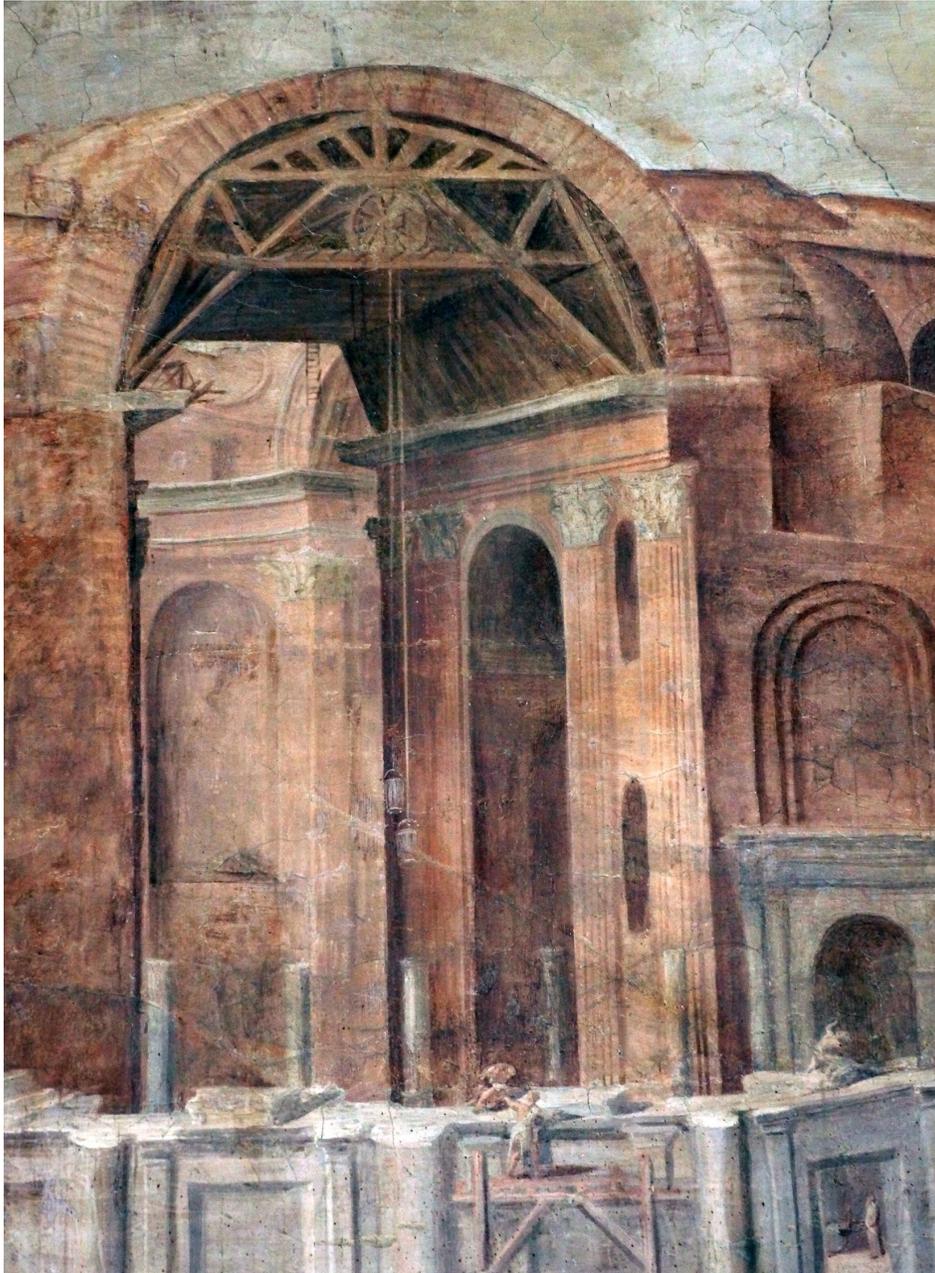
### **Fabrizio Sommaini**

Fabrizio Sommaini is a doctoral student in Classical Archaeology at the Humboldt University of Berlin and a research assistant at the Brandenburg University of Technology Cottbus-Senftenberg (DFG Research Training Group 1913 "Cultural and Technological Significance of Historical Buildings"). His project deals with a wing of the imperial palace, the Domitianic complex, investigated from its construction to the present day.

### **Thursday February 23, 4 pm (CET)**

The lecture will be hybrid, via MS Teams. Please register [here](#) 2 days beforehand. You will receive the link the day before.

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Vasari's fresco (detail) of 1546 in the Sala dei Cento Giorni, Cancelleria, Rome, showing the erection of the brick barrel vault on the southern arm of St. Peter's Basilica, Rome. © Stefan Holzer

## 2023 CHsB lecture series on construction history

### **Early Modern construction techniques. How to build a vault**

Perhaps it is one of the biggest enigmas in construction history how master builders erected vaults and domes. Centering and formwork, but also solid scaffolding are key issues in the erection of vaults and (self-supporting) domes. Based on scattered evidence on dome construction, Prof. Stefan Holzer establishes a multi-faceted picture of historic procedures for building masonry vaults and domes.

### **Stefan Holzer**

Professor of Building Archaeology and Construction History at ETH Zurich, Stefan Holzer is an expert on the architecture of the Middle Ages, the Early Modern period and the 19th century, on historical timber and masonry construction.

### **Thursday March 30, 4 pm (CET)**

The lecture will be hybrid, via MS Teams. Please register [here](#) 2 days beforehand. You will receive the link the day before.

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A North West View of St. Paul's Cathedral, London © British Library

## 2023 CHsB lecture series on **construction history**

### **Building St Paul's**

St Paul's has dominated London's skyline for 300 years. The architect, Sir Christopher Wren, is well known, but what about the ordinary craftsmen, the contractors, the quarrymen, the humble stonemasons and the carpenters? The story of these people and life on a seventeenth-century building site reaffirms St Paul's not only as one man's masterwork, but as an incredible collaborative achievement.

### **James Campbell**

Architect and art historian, Prof. James Campbell is Seear Fellow in Architecture and History of Art at Queen's College, Cambridge and president of the Construction History Society. His research focuses on the development of building construction; seventeenth century architecture and the design of libraries throughout the ages.

### **Thursday April 20, 4 pm (CET)**

The lecture will be hybrid, via MS Teams. Please register [here](#) 2 days beforehand. You will receive the link the day before.

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## 2023 CHsB lecture series on construction history

### Guided tour: Brussels' City Hall

The City Hall is one of Brussels' most remarkable historic buildings. Philippe Sosnowska will be our guide through the building, from the cellar to the roof, demonstrating how building archaeology contributes to a better understanding of its construction and evolution through time.

### Philippe Sosnowska

Professor at the Faculty of Architecture of the University of Liège, Philippe Sosnowska teaches building archaeology and construction history. His research on building materials used in Brussels between the 13th and 19th centuries is based on a multidisciplinary approach, at the crossroads of archaeology, archaeometry, history and history of art.

### Thursday May 4, 1 pm & 3 pm (CET)

Only students registered in the course can participate in this guided tour, after registration via Canvas.

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Gothic window in the classical west wing, dated 1444. © Philippe Sosnowska, CréA Patrimoine.

**We would like to thank the many organisations that have supported or financed the research that is presented in this series.**

This lecture series is organised in the framework of the course 'Architectural and Construction History (before 1850)' by prof. Stephanie Van de Voorde and the Joint VUB-ULB research group 'Construction HistorieS Brussels (CHsB). The course is part of the educational programmes Bachelor in Architectural Engineering and Master in Urban Studies (Vrije Universiteit Brussel and Université Libre de Bruxelles). For more information, contact [stephanie.van.de.voorde@vub.be](mailto:stephanie.van.de.voorde@vub.be).



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