

Scaling the Cosmos in the Modern Era

Images, Tools, and Instruments



Scaling the Cosmos in the Modern Era

Images, Tools, and Instruments

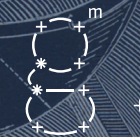
Tabula

Orbium planetarum dimensiones et distantias per quinque regularia corpora geometrica exhibemus.

19-21
November
2025

**Museo
Galileo**
Piazza dei Giudici 1
Firenze

Conference organized by:



**museo
galileo**

Istituto e Museo
di Storia della Scienza



CENTRE CHASTEL



Info:

info@museogalileo.it

www.museogalileo.it

Free admission subject to
availability

α Sphaera Saturni. β Cubus. γ Sphaera Jovis. δ Tetraëdron. ϵ Sphaera Martis. ζ Do-
decaëdron. η Orbis Terrae. θ Ikosaëdron. ι Sphaera Veneris. κ Octaëdron. λ Sphaera

International Conference
***Scaling the Cosmos in the Modern Era:
Images, Tools, and Instruments***

Museo Galileo, Piazza dei Giudici 1, Florence
November 19-21, 2025

Organizers: Florian Métral (CNRS/Centre André-Chastel) and
Maddalena Napolitani (Museo Galileo)

DAY 1 — OPENING & VISIT

Wednesday, November 19, 2025 | 4:00 PM – 6:00 PM

Welcome Address

- Roberto Ferrari (Executive Director, Museo Galileo) and Filippo Camerota (Scientific Director, Museo Galileo)

Introduction to the Conference

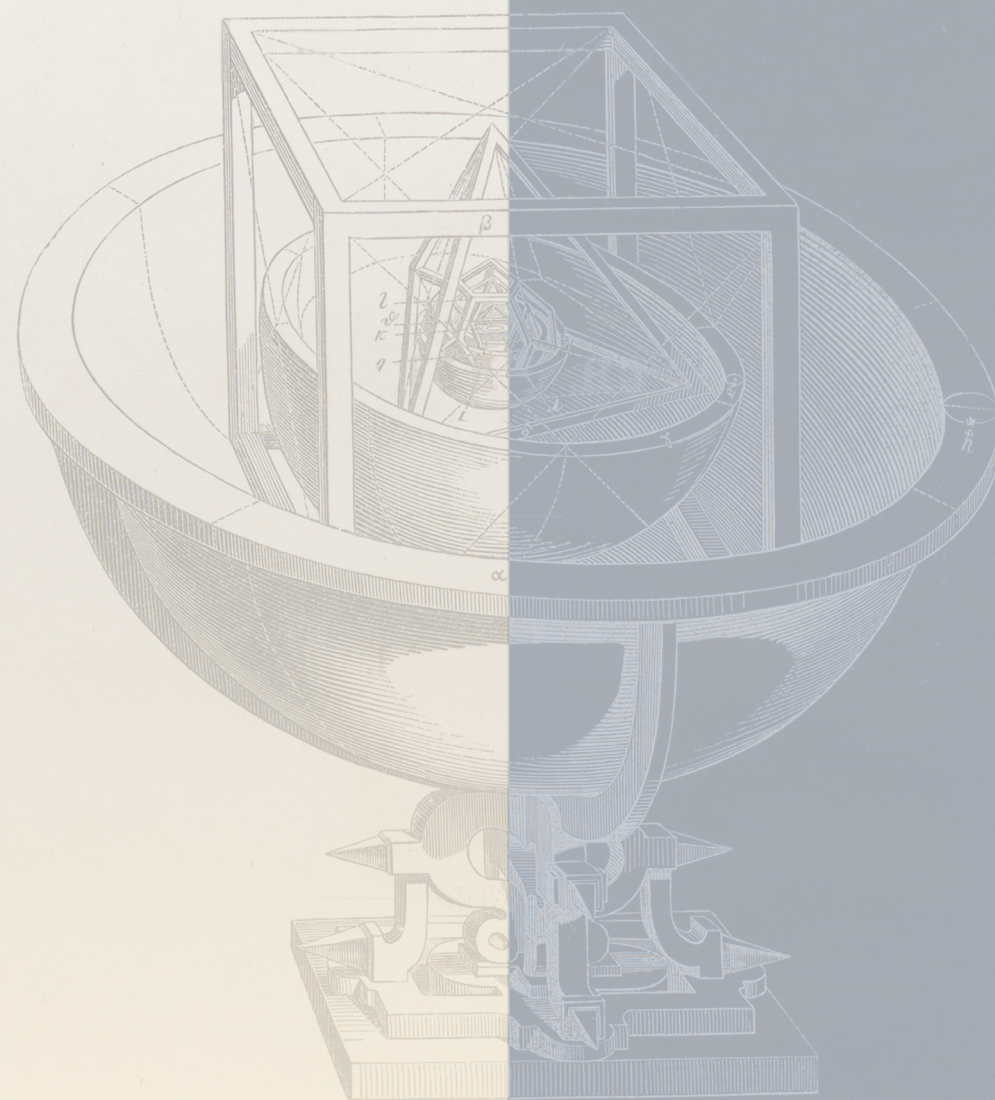
- Florian Métral (CNRS/Centre André-Chastel, CPJ Arvigraph) and Maddalena Napolitani (Assistant Curator, Museo Galileo)

Visit to the Museo Galileo collections (for conference speakers only)

- Giorgio Strano (Head of Collections, Museo Galileo) and Gaia Cugini (Assistant Curator, Museo Galileo)

Tabula

Orbium planetarum dimensiones et distantias per quinque regularia corpora
geometrica exhibens.



α Sphaera Saturni. β Cubus. γ Sphaera Jovis. δ Tetraëdron. ϵ Sphaera Martis. ζ Do-
decaëdron. η Orbis Terrae. θ Ikosaëdron. ι Sphaera Veneris. κ Octaëdron. λ Sphaera

The conference *Scaling the Cosmos in the Modern Era: Images, Tools, and Instruments* revolves around the concept of scaling as a critical framework that goes beyond simple measurement: it operates across spatial, temporal, and cognitive registers, transforming how we understand, represent, and perceive the universe. The conference will examine the diverse ways in which images, tools, and instruments have been used to scale the cosmos. From early astronomical clocks and celestial globes to modern digital simulations, each act of scaling reveals both possibilities and limitations in our attempt to grasp the universe. By bringing together perspectives from the Humanities and the Natural Sciences, the conference reframes the very idea of scale. This interdisciplinary approach demonstrates that scaling the cosmos is an evolving practice, enabling us to understand the universe not merely as a physical reality, but as a complex cultural, epistemic, and historical construct.

The conference is co-organized by the CNRS/Centre André-Chastel and the Museo Galileo. It is part of the research project “Celestial Spectacles” (CNRS/Centre André-Chastel), funded by the CNRS Chair of Professor Junior ARVIGRAPH, and receives scientific support from the PEPR “Origins” (CNRS), dedicated to the origins of planets and life. The event is situated within the centennial of the Istituto di Storia della Scienza (founded in 1925), while also drawing on its recent exhibitions *Italian Hours* (2023) and *Celestial Splendours* (2023-2024). The conference marks the 400th anniversary of Giovanni Domenico Cassini’s birth as well.

DAY 2 — Conference Day

Thursday, November 20, 2025 | 9:30 AM – 5:45 PM

9:30 AM – 12:15 AM | Session 1: *Early Modern Era I*

- Stéphane Toussaint (CNRS/Centre André-Chastel, Paris)
Scaling the Cosmos in Marsilio Ficino’s De Amore

- Jérémie Koering (University of Fribourg)
Scaling the Future. An Astromantic Sky in Mantua

10:45 AM – 11:00 AM | Coffee break

- Francesco Barreca (Università di Milano)
Philosophizing with Hands: Patronage-Seeking, Theory Evaluation, and Popularization of Knowledge in Johannes Kepler

- Ruth Noyes (Estonian Academy of Arts, Tallinn)
Odo van Maelcote’s Equinoctial Astrolabe: Print, Parallax, and the Society of Jesus in the Quest to Scale the Cosmos in Galilean Europe

12:15 AM – 1:45 PM | Free lunch

1:45 PM – 3:00 PM | Session 2: *Early Modern Era II*

- Günther Oestmann (Technical University of Berlin)
Representing and Understanding Celestial Movements on a Comprehensible Scale: The Application of Equatoria and Gearing Mechanisms to Clocks

- Giorgio Strano (Museo Galileo)
On Cassini and his Preference for Campani’s Telescope

3:00 PM – 4:15 PM | Session 3: *From the Late Modernity to the Contemporary Era*

- Ilaria Ampollini (Università di Ferrara)
Immersed in the Cosmos: Manipulation, Miniaturisation, and the Circulation of Scientific Knowledge (18th-19th Century)

- Charlotte Bigg (CNRS, Centre Alexandre-Koyré)
Narratives of Cosmic Scaling and Their Alternatives in the Observatory Sciences since the 19th Century

4:15 PM – 4:30 PM | Coffee break

4:30 PM – 5:45 PM | Session 4: *Scaling the Cosmos in Contemporary Visual Displays*

- Thomas Moser (Vienna University of Technology)
Planet(arium) Hollywood: Cosmic Simulation, Visual Spectacle and Education in Mid-Century Los Angeles

Enguerrand Lasclos (MUCEM, Marseille)
Presentation of the Exhibition “Lire le ciel” (MUCEM, Marseille)

8:00 PM | Dinner (for conference speakers only)

DAY 3 — WORKSHOP & FINAL ROUNDTABLE

Friday, November 21, 2025 | 9:30 AM – 1:00 PM

9:30 AM – 11:00 AM | Workshop Presentations

All speakers from Day 2 will be kindly invited to act as respondents

- Ricardo Uribe (Freie Universität Berlin)
Universal Clocks for the New World: Re-scaling Time in the Modern Era

- Angèle Tence (Université Paris 1 Panthéon-Sorbonne)
The Hand-Cranked Celestial Globe on the Title-page of the Triumpho di Fortuna (1527)

- Antoine Gallay (University of Lausanne)
Making the Heavens Tangible: Late 17th-Century Attempts to Represent the Cosmos in a Verisimilar Way

11:00 AM – 11:15 AM | Coffee break

11:15 AM – 12:45 AM | Final Roundtable

Contemporary Cartographies of the Cosmos in Geosciences and Astrophysics

Caudia Principe (INHIHEO/IGG/CNR Pisa)
Scaling the Earth Using Geological Maps

- François Bouchet (CNRS/Institut d’astrophysique de Paris)
Scaling the Cosmos with Archeological Light Maps

Moderators: Florian Métral and Maddalena Napolitani

12:45 AM – 1:00 PM | Conclusion of the Conference