



## **CALL FOR PAPERS (DEADLINE 01/07/2023)**

Final schedule: 15/07/2023

### **1<sup>ST</sup> CONGRESS OF APPLIED HISTORICAL METROLOGY. New perspectives of Research**

16 - 17 November 2023

Centro Español de Metrología, Tres Cantos (Madrid)

[Location](#) – [How to arrive?](#)

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Half a century after the publication of "Measures and Men" (Witold Kula, 1970), the teachings of this eminent Polish professor have not been forgotten. As Kula himself had warned, in order to open up to new horizons historical metrology had to overcome the narrow-mindedness of simply translating and metrically equating old measures. And this is indeed what happened.

Based on this premise, we propose the **1<sup>st</sup> Congress of Applied Historical Metrology. New Perspectives of Research**. Its aim is to present current research that showcases the progress made by the discipline in recent years.

The congress will be structured around two keynote speeches and four major sessions:

#### **Opening**

Rubén Castro Redondo, University of Cantabria  
José Ángel Robles Carbonell, Spanish Metrology Center

#### **Opening Keynote Speech**

Sandro Guzzi-Heeb, Université de Lausanne,  
*Les heures de travail et la comptabilité de l'au-delà. Aspects de la mesure de l'espace-temps à l'époque moderne*

**Session 1. Measures as an attribute of power. Discipline and repression.**

**Session 2. Measures, numbers, and economic history. Trade, markets, and currency.**

**Session 3. Metrology and social history. Behaviors, conflicts, and resistances.**

**Session 4. Metrology and cultural history. Measuring and comparing. Counting and calculating.**

Visit to the Museum of Weights and Measures of the Spanish Metrology Center (CEM)

#### **Closing Keynote Speech**

Ofelia Rey Castela, University of Santiago de Compostela,  
*La Metrología Histórica después de Kula. Éxitos, Retos y perspectivas de futuro*

**The first session** will examine the legislative and regulatory practices of authorities, from local to state level, as well as other influential powers. The goal is to explore how these practices were used to enforce metrological discipline through the standardization of legal units and their compulsory and exclusive use. In this context, and given the importance of customary practices for traditional societies, positive law should not be seen as the only means of imposition.

The session also examines the methods of control that holders of measuring instruments were subjected to, simply by virtue of possessing them. Such controls were enforced through various means, including the surveillance of individuals holding unipersonal positions and who operated in both public spaces (such as markets) and private spaces (such as homes, workshops, and silos). In addition, inspectors made periodic visits to compare official weights and measures with those held by individuals, to ensure compliance with prevailing regulations. If non-compliance was found, punitive measures were taken, and falsifiers were accused based on the different types and degrees of punishment contained in the law.

We welcome contributions that examine these or other mechanisms of metrological discipline, at any scale, location, and period.

**The second session** focuses on the metrological analysis of spaces of commerce and exchange, where the social practice of measuring tools has significant economic implications. In fact, even the pre-fiduciary monetary system cannot escape this constraint, as weights and scales were indispensable tools for money changers and bankers in assigning the value of each coin based on the amount of precious metal it contained. We are interested in examining the commercial phenomenon both at the local and internal level, such as fairs and markets, and in its external dimension, such as ports and customs. This includes exchanges that are made without the use of currency, such as, on the one hand, barter markets, which are mostly informal and operate at the retail level, and, on the other hand, payments in kind, which are primarily derived from the settlement of rents and taxes in the form of surplus products.

By their very nature, these commercial spaces connected different people, norms, practices, and measures, converting them into important social laboratories for observing the practices of mutual understanding among different actors, which effectively resulted in commercial exchanges.

**The third session** aims to analyse the conflicts that arose within societies due to the metrological systems that existed before the Decimal Metric System, both at the individual and collective levels, which hindered mutual understanding between individuals and ultimately led to metrological unrest. The origin of many of these conflicts lay in the institutions themselves, which competed with each other in trying to impose different metrological standards and practices, adding more uncertainty to an already heterogeneous situation. On the other hand, payments in kind were always sources of conflict, because the nature, condition, and magnitude of the measures influenced the amount of goods changing hands and, therefore, the amount of income, which naturally had opposing effects for collectors and payers: the former would fight to make them larger, the latter to make them smaller.

At times, the common people participated in episodes of metrological resistance, slowing down or impeding initiatives by the institutions and the government, trying to avoid the control and adaptation of their standards by the authorities, or even refusing to make payments in measures that they deemed excessive. These actions, more or less violent but often with a collective character, are of great interest due to their undeniable social significance for these traditional communities.

**The fourth session** will explore the metrological phenomenon from a cultural perspective, proposing a space for reflection on the mental and immaterial universe behind different systems of measurement throughout history in different spaces and cultures. We are interested in epistemological approaches to the world of metrology, in an effort to promote the transversality of scientific approaches to technical innovations and scientific advances, but also in popular behaviours or ethnographical inventories, such as the measuring of watercourses, wood, times and practices around the establishment of turns for communal use... Therefore, not only are submissions on the usual traditional metrological quantities —weight, capacity, length, and area— welcome, but also on other measurements like time or other specific measures in areas such as pharmacy, architecture, physics, navigation, engineering, and mathematics. The latter is of particular interest in so far as arithmetic, as well as both systems and devices for counting and quantification.

The conference theme is not limited to any particular political space or predetermined historical era; on the contrary, the goal is to present ongoing metrology-based research with a transversal and interdisciplinary approach, where not only History itself but also the History of Law, Economic History, Sociology, Social Anthropology, History of Science and Philosophy, and Ethnography, among others, can find a place as long as they approach Historical Metrology with interest and solid methodological foundation.

### **CALL FOR PAPERS**

**Free registration**

**DEADLINE: 01/07/2023**

**Title, abstract (300 words), keywords (5), sessions of interest (1-4)**

### **SUBMISSION**

**[metrologiahistorica@gmail.com](mailto:metrologiahistorica@gmail.com)**

### **LANGUAGES**

**Papers in Spanish, French, Portuguese, Italian and English Will be accepted.**

### **HIGH IMPACT EDITORIAL**

**At the conclusion of the conference, presenters will be invited to submit their contributions to a collective monograph, which will be published in 2024 with a high-impact publisher/at a high-impact journal] (Q1-Q2 in the SPI ranking. Submissions will undergo a blind peer review process prior to publication.**

### **Comité Organizador**

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José Ángel Robles Carbonell, Centro Español de Metrología

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