

THE NATIONAL SEMINAR ON THE HISTORY OF MATHEMATICS

THIRTY EIGHT YEARS OF RESEARCH AND DISSEMINATION IN THE HISTORY OF MATHEMATICS

by **Luis Saraiva***

1 INTRODUCTION¹

The National Seminar on the History of Mathematics (SNHM) was founded in January 1988 at a meeting held at the Department of Mathematics of the University of Coimbra, in which researchers from the Mathematics Departments of the Universities of Coimbra, Lisbon, Minho and Porto played a fundamental role.²

The need to create a national institution with the aim of researching and disseminating the history of Mathematics — and in particular the history of Portuguese Mathematics — originated in the commemorations of the Portuguese mathematician José Anastácio da Cunha (1744–1787)³ on the bicentenary of his death in 1987. Colloquia were organised in Coimbra, Évora and Lisbon, with the publication of Proceedings from all three events.

The University of Coimbra published facsimile editions of da Cunha's most important work, the *Principios Mathematicos*, originally published in 1790 — three years after the author's death [Cunha, 1987a] — and of its French translation by João Manuel de Abreu (1757–1815), published in Bordeaux in 1811 by the publisher André Racle⁴ [Cunha, 1987b].

Also in Lisbon, the National Library hosted an exhibition offering a broad view of da Cunha's work, including his literary output, as suggested by its title, *José Anastácio da Cunha (1744–1787) — Mathematician and Poet*. A catalogue was published, including articles on the central aspects of his mathematical and poetic work, together with a small appendix containing some of his poems [Catálogo, 1987].

The main event of this commemorative programme took place in Lisbon: the international colloquium *Anastácio da Cunha (1744–1787) — The Mathematician and the Poet*, held from 8 to 10 October 1987 in Forum Picoas. It brought to Portugal distinguished specialists in the History of Mathematics: Ivor Grattan-Guinness (1841–2014), one of the great historians of the twentieth century and a Fellow of the Royal Society of London, whose extensive body of work includes the landmark three-volume study *Convolutions in French Mathematics, 1800–1840* (approximately 1,600 pages); Ubiratan d'Ambrosio (1932–2021) of the University of Campinas (UNICAMP), the principal founder of Ethnomathematics; Enrico Giusti (1940–2024) of the University of Florence; Jean Mawhin (1942–) of the Catholic University of Louvain; and Jesus Hernandez

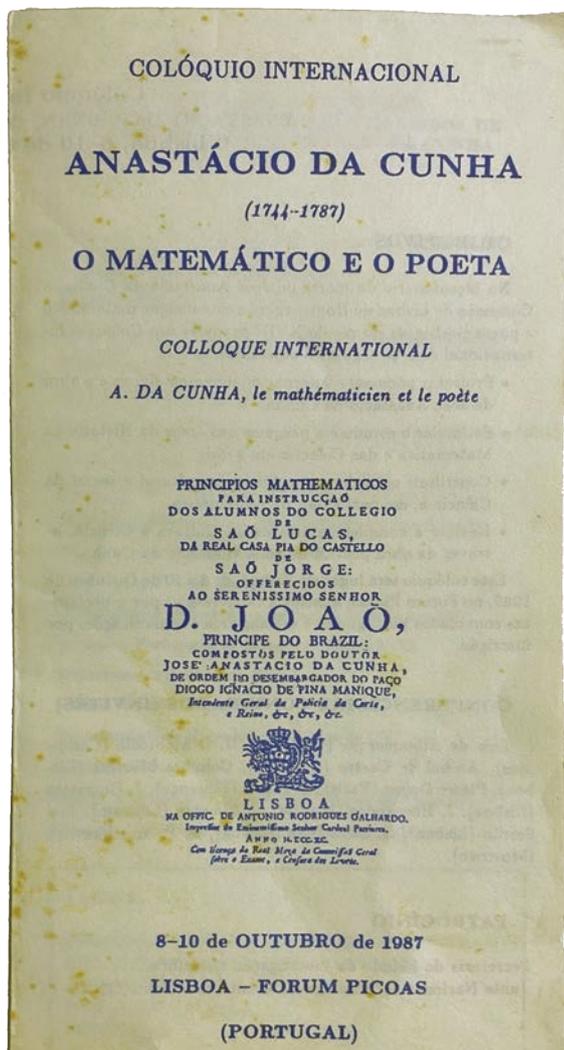
¹ A more extensive and comprehensive paper on the SNHM has been submitted for publication in the *Memórias da Academia das Ciências de Lisboa*. This text aims only to provide a general overview of the foundation and development of the Seminar.

² Other researchers were also present, but only those from the universities mentioned above actively contributed to the creation and functioning of the SNHM.

³ A mathematician praised in articles by Portuguese mathematicians as in [Gonçalves, 1940] and internationally known, mainly since the publishing of the paper [Youschkevitch, 1973].

⁴ In 1816, unsold copies of the Bordeaux edition were offered for sale in Paris by the publisher Veuve Courcier, with only the title pages replaced [Giusti, 1990, p. 46, note 3].

* CIUHCT, Department of Mathematics, FCUL
Financed by Fundação para a Ciência e a Tecnologia, I.P./MCTES through national funds UID/00286/2025.



Flyer for the Internacional Proceedings of the Meeting on da Cunha Lisbon, 1987



Proceedings of the Lisbon Meeting Lisbon, 1990

(1944–), Professor at the Autonomous University of Madrid.

This event provided Portuguese mathematicians with the opportunity not only to attend research presentations in the history of Mathematics by leading specialists, but also to engage directly with these scholars. Over the course of the colloquium, the idea gradually emerged that, given the longstanding gap in Portugal in the field of the History of Mathematics — where only sporadic articles by mathematicians on aspects of Portuguese mathematical history had occasionally appeared — a national institution should be created with the central aim of developing research in this area, placing the study of Portuguese mathematics at the heart of its activities, and fostering con-

tinuous exchanges among the emerging community of Portuguese historians of mathematics.

The Proceedings of the Lisbon meeting [Anastácio, 1990] already reflected a concern to integrate documents from Portugal’s mathematical history and make them available to interested readers. In addition to the texts of the communications, an extensive appendix of important materials was included: two writings by José Anastácio da Cunha — the *Carta Physico-Matematica sobre a Theorica da Polvora em Geral e a determinação do melhor comprimento das peças em particular* and the *Ensaio sobre os Princípios de Mechanica*; a letter by João Manuel de Abreu (1757–1815) mentioning a list of unpublished works;⁵ the texts of the polemic with José Monteiro da Rocha (1734–1819), an import-

⁵ Many of these, though not all, were subsequently found in the decades following the Colloquium by researchers associated with the SNHM



Summer School on the History of Mathematics
Évora, July 1990

Some of the participants:

Front row, from the right: Jean Dhombres, first, Sergio Nobre, fourth
Back row, from the right: Ahmed Djebbar, second, Enrico Giusti, fourth; Giorgio Israel, fifth; Luis Saraiva, ninth; António Leal, tenth; Carlos Sá, eleventh; Maria Fernanda Estrada, twelfth. The last four were among the founders of the SNHM.

ant mathematician and colleague of Anastácio at the University of Coimbra who was instrumental in the crucial university reform of 1772; and the texts relating to the controversy surrounding the publication of the French translation of the *Principios Mathematicos*, including the then-known reviews published in foreign journals.⁶ Of the 506 pages of the Proceedings volume, approximately one third is taken up by this appendix.

At the close of the Colloquium, some of the Portuguese participants met with Ivor Grattan-Guinness and sought his advice on the general direction the future SNHM should take. He emphasised that the Seminar should hold regular meetings where members could present and discuss their work, and that the presence of researchers from other countries should always be ensured — an essential factor not only for the progress of the SNHM but also for establishing its connection with the international network of historians of Mathematics. It was equally important for Portuguese researchers to participate in international events, particularly colloquia and workshops.

2 THE EARLY YEARS OF THE SNHM (1988–1990)

The SNHM was founded in January 1988 with the prospect that the new institution would consolidate and develop, to fill the gap that had long existed in Portugal in the field of the History of Mathematics, both in terms of research and dissemination. Given that this was a new beginning, and making use of the work carried out in the preceding months during the Anastácio da Cunha commemorations, this mathematician, his work and his era were taken as the preferred theme for 1988. As the Seminar developed, the history of mathematics education was also incorporated among its research and dissemination themes in later years.

The SNHM started without institutional support, subsisting solely on contributions from its members. Meetings were therefore held in rooms provided by the Mathematics Departments of its members, so that no venue rental was required. For foreign speakers, researchers who happened to be in Portugal for

⁶ In 2011, João Caramalho Domingues, in a paper published in issue 65 of the SPM Bulletin, added to the three known reviews published in foreign journals a fourth, made in 1816 to the volume published in Paris [Caramalho, 2011].



**José Anastácio da Cunha Colloquium
Braga, 2006**

Seven of the founding members of the SNHM with Professors Grattan-Guinness and Jean Mawhin.

From left to right:

Front row: Luis Saraiva, Maria Fernanda Estrada, António Leal, Jaime Carvalho e Silva and Ivor Grattan-Guinness.
Back row: João Queiró, José Francisco Rodrigues, Jean Mawhin and Carlos Sá

some reason were approached: on occasion they had been invited to give lectures at one of our faculties, meaning their travel costs were covered by the host departments, so no additional travel expenses were necessary. Once in Portugal, either SNHM members transported them in their own vehicles, or the necessary train or coach tickets were purchased.

The first Seminar meeting took place in Braga in April 1988, at the *University of Minho*, with foreign guest Professor Ubiratan D'Ambrosio, one of the participants at the Lisbon Colloquium, who was in Portugal at the time.

The second meeting took place in Lisbon in November 1988, at the *Institute of Physics and Mathematics of the University of Lisbon*, with Professor Christian Houzel of the University of Paris XIII as guest, taking advantage of his visit to Lisbon to participate in an *Autumn School* organised by the *Portuguese Mathematical Society* (SPM) at the *Instituto Franco-Português*. A member of the Seminar had met Professor Houzel in September of that year at a History of Mathematics meeting in Cetrano, Italy (*Giornate di Storia della Matematica*), and knowing of his upcoming visit to

Lisbon, had invited him to participate in the SNHM meeting. Due to an unexpected problem arising during the SPM event, Professor Houzel's lecture, originally planned for the SNHM meeting, had to be delivered during the *Autumn School* instead.

The third meeting took place at the *Faculty of Sciences of the University of Lisbon* in March 1989, with Professor Jean Dhombres, then of the University of Nantes, as the foreign guest — again making use of his visit to Lisbon to give a lecture at the Department of Mathematics of that faculty.

The aims of the SNHM are in accordance with the fundamental principles and objectives of the SPM, and it was therefore natural that the SNHM should seek integration into the SPM's structure. This took place on 16 November of that year, when it became an autonomous section of the SPM.

A fourth meeting took place in April 1990, with the participation of Professor Ivor Grattan-Guinness, at the Department of Mathematics of the *University of Coimbra*. Professor Grattan-Guinness came to Portugal with grants from the *Lisbon Academy of Sciences* and the *London Royal Society*. In addition to his participation in the SNHM meeting, he delivered a series of 14 lectures in Lisbon, Coimbra, Évora and Braga, in collaboration with various departments of the Universities of Lisbon, Coimbra, Évora and Minho.

The founders of the SNHM were all holders of doctorates in mathematics but, for the most part, lacked specific training in the literary and historical analysis of topics in the History of Mathematics. At the colloquia held during the Anastácio da Cunha commemorations, they had been able to observe how different historical research and analysis was from the mathematical work to which they were accustomed. The need was felt for training provided by specialists in this area. To this end, Professor Jean Dhombres was approached, and he offered to put together a small team of specialists to come to Portugal that year (1990) to hold a *Summer School in the History of Mathematics*.

Together with Professor Dhombres came three



6th Luso-Brazilian Meeting on the History of Mathematics,
S. João del Rei, Minas Gerais, August 2011

distinguished historians of Mathematics: Professor Enrico Giusti, who had previously been in Lisbon at the Colloquium on Anastácio da Cunha; Professor Giorgio Israel (1945–2015) of the University of Rome La Sapienza; and Professor Ahmed Djebbar (1941–) of the University of Lille. They brought not only abundant written material for distribution among the participants, but also some of their doctoral students, who gave presentations alongside Portuguese participants. The Summer School took place from 16 to 21 July at the *Colégio da Herdade da Mitra* in Évora.

This meeting was also significant for another reason. One of the participants was Sergio Nobre, at the time a Brazilian doctoral student working in Leipzig, in what was then East Germany, under the supervision of the distinguished historian of Mathematics Hans Wussing (1927–2011). He came to Évora on the recommendation of Professor Ubiratan D’Ambrosio, who had kept abreast of developments in Portu-

gal and, on seeing who was organising the Summer School, immediately contacted Sergio Nobre. He told him that the *Summer School* would likely be of a very high standard and that he should attend, as it would be an excellent opportunity to enrich his training. This was the beginning of a personal and professional relationship with the historians of Portuguese Mathematics and with the SNHM, which proved fruitful, as we shall see, and continues to the present day.

3 THE SNHM FROM 1993 TO THE PRESENT

3.1 Introduction

In 1991 and 1992 there were no SNHM activities. This was very likely due primarily to the fact that some of its most active members were abroad working at universities, and there was insufficient motivation among those who remained in the country to resume the



**4th Iberian Meeting on the History of Mathematics
Leiria Museum, June 2023**



**38th SNHM Meeting
Coimbra, June 2025**

Seminar's activities. From 1993, however, the work of the Seminar resumed, and since then there have been no further years without activity.

Until the mid-1990s the Seminar had no formal regulations, operating instead by consensus among its members. During the presidency of Professor Graciano Neves de Oliveira at the SPM (1996–2000), he made us understand that if the SNHM wished to expand, it was necessary to have a set of regulations. We accordingly drafted these and submitted them to the members of the Seminar, who approved them. They broadly followed the recommendations of Grat-tan-Guinness, to which we added elements drawn from our own experience within the SNHM. In this document, the Seminar is defined as an autonomous section of the SPM, whose central aim is to develop research in the history of Mathematics, and especially in the History of Portuguese Mathematics, serving as a point of connection and support for historians of Portuguese mathematics.

The SNHM has a General Council, which currently has 27 members, of whom 7 are founders, and which includes researchers from the Universities of Aveiro, Coimbra, Évora, Lisbon, Minho, Nova de Lisboa, Porto and Trás-os-Montes e Alto Douro, as well as the Naval School, the Polytechnic of Leiria and the Polytechnic of Viseu. The General Council is responsible for electing the Secretariat, which consists of three

members, one of whom serves as General Coordinator of the SNHM, for periods of three years. Elections are currently held by electronic vote. Lists standing for the Secretariat must present an action programme for their term, which is sent to all members of the General Council. The Secretariat directs the activities of the SNHM during its term of office. At the end of the term, the Secretariat must send a report on its activities over the three-year period to members of the General Council. Every six years, the General Council should review its composition and may adjust if it is determined that any member has, unambiguously and consistently, ceased to contribute to the activities of the SNHM. Membership of the General Council is achieved by a substantiated proposal from one of its members, accompanied by the candidate's CV, followed by a vote.

Since its integration as an autonomous section of the SPM, even before regulations were formally established, the SPM has always provided informal support to the Seminar's activities. From the period of Nuno Crato's presidency of the SPM (2004–2010) onwards, an annual allocation for SNHM expenses has been established, essentially to cover the travel and accommodation costs in Portugal of a foreign speaker for one of its meetings. Due to budgetary constraints, only speakers based in Europe can be invited.

Location	Frequency	Institution
Lisbon	9	Museum of Science of UL – 4 / Interdisciplinary Institute of UL (former IFM) – 3 / Faculty of Sciences, University of Lisbon – 1 / Academy of Sciences of Lisbon/National Museum of Natural History and Science (MUNHAC) – 1
Coimbra	8	Department of Mathematics, UC
Aveiro	4	Department of Mathematics, UA
Porto	2	Faculty of Sciences, University of Porto
Évora	2	Department of Mathematics, UE
Monte da Caparica	2	Faculty of Sciences and Technology, UNL
Alfeite	2	Naval School
Amadora	1	Military Academy
Braga	1	University of Minho
Castelo Branco	1	Higher School of Education
Gouveia	1	Municipal Library Auditorium
Leiria	1	Online meeting (due to Covid-19 pandemic)
Marco de Canavezes	1	Municipal Auditorium
Mértola	1	Auditorium of the Natural Park of the Guadiana Valley
Santiago do Cacém	1	Municipal Auditorium
Viseu	1	Higher School of Education

Table 1. Locations of SNHM meetings – 1988–2025

Name	Country	Institution	No. of Meetings
Ubiratan D'Ambrosio	Brazil	UNICAMP / University of São Paulo	4
Eberhard Knobloch	Germany	Technische Universität Berlin	3
Ivor Grattan-Guinness	England	London Royal Society	3
José Chabas	Spain	University Pompeu Fabra, Barcelona	3
Jean Dhombres	France	University of Nantes / CNRS	2
Jens Høyrup	Denmark	Roskilde University	2
Luis Español	Spain	University of La Rioja, Logroño	2
Maria Isabel Maroto	Spain	University of Valladolid	2
Mariano Esteban Piñeiro	Spain	University of Valladolid	2
Sergio Nobre	Brazil	UNESP, Rio Claro	2
Ugo Baldini	Italy	University of Padua	2
Vitor Navarro Brotons	Spain	University of Valencia	2
Wagner Valente	Brazil	Federal University of São Paulo	2

Table 2. Foreign guests with more than one participation

3.2 The National Meetings

Since 1993, SNHM meetings have been held regularly — 34 in 33 years. In all of them, as stipulated in the Regulations, there has always been at least one foreign guest. Over the 38 meetings held to date, 59 non-Portuguese researchers from 14 countries have presented 77 communications. Brazil has the highest number of participants (10), followed by France (9), Germany,

Spain and England (all with 8) and Italy (5). Outside Europe, the United States (3), Canada (2), Argentina (1), Algeria (1) and the People's Republic of China (1) are represented. The number of participants changes from meeting to meeting, but most frequently there are between 30 and 50 people attending each event.

Whenever possible, we have sought to hold Seminar meetings outside the major cities, in locations where

historians of Mathematics were active, so that these events might contribute to disseminating the history of Mathematics in those places. Between 2013 and 2023, we consecutively held 11 meetings outside the three largest cities: Coimbra, Lisbon and Porto. On two occasions, we held meetings in the birthplace of prominent mathematicians: José Sebastião e Silva (1914–1972) in Mértola in 2014, and José Monteiro da Rocha in Marco de Canavezes in 2019. Both intended to celebrate the two mathematicians, the former on the 100th anniversary of his birth, the later on the 200th anniversary of his passing.

The next meeting, the 39th, is scheduled at the Naval School, on 8 and 9 May 2026.

3.3 The Luso-Brazilian Meetings and the Iberian Meetings on the History of Mathematics

Sergio Nobre and Ubiratan D'Ambrosio were part of the main driving force in the development of research and dissemination of the history of Mathematics in Brazil. They were instrumental in creating the *Brazilian Seminars on the History of Mathematics*, which began in 1995, and later led to the founding of the *Brazilian Society for the History of Mathematics* (SBHMat). Sergio Nobre was also one of the founders of the *Brazilian Journal of the History of Mathematics* in 2001.

The collaboration between Brazilian and Portuguese historians led to the creation of the *Luso-Brazilian Meetings on the History of Mathematics*, with the first being organised in Coimbra in 1993. Since then, they have been held periodically and alternately in Brazil and Portugal. Following Coimbra, in August/September 1993, eight further meetings have taken place: Águas de São Pedro, São Paulo, March 1997; Coimbra, February 2000; Natal, Rio Grande do Norte, October 2004; Castelo Branco, October 2007; São João del Rei, Minas Gerais, August 2011; Óbidos, October 2014; Foz do Iguaçu, Paraná, August 2018; Setúbal, October 2022. All meetings were very well attended; those held in Brazil always had more than 100 participants, those in Portugal slightly less. All meetings, with the exception of the third (Coimbra, 2000), have their Proceedings published. Regarding the missing Proceedings, the local organiser has promised to publish them in a near future, as he holds most of the texts of the communications delivered. From the 5th Meeting (Castelo Branco, 2007) onwards, a peer review system was introduced

to ensure the quality of articles included in the Proceedings. Those of the 5th Meeting were generously funded by the Municipality of Castelo Branco. Those subsequently published in Portugal (Óbidos 2014, and Setúbal 2022) were funded from registration fee revenue, so their publication entailed no cost to the SPM. Print runs were limited, primarily for the editors, for libraries in Portugal and Brazil, for plenary speakers, and for the SPM, which retained the surplus copies of each publication. To give an idea of the scope of these Proceedings, we note the page counts for the last three meetings held in Portugal: 5th Meeting, Castelo Branco, 570 pages; 7th Meeting, Óbidos 2014, two volumes, 598+574 pages; 9th Meeting, Setúbal 2022, 688 pages. The next meeting, the 10th, will take place in Belém do Pará, from 11 to 14 August 2026.

Following the centenary celebrations of the *Royal Spanish Mathematical Society* in Ávila in 2011, Spanish and Portuguese researchers in attendance decided to launch the *Iberian Meetings on the History of Mathematics*, to be held periodically every three years, alternating between Spain and Portugal. Four meetings have been held to date: Santiago de Compostela, January 2013; Coimbra, July 2016; Seville, July 2019; Leiria, June 2023 (the latter was originally planned for 2022 but had to be postponed by one year due to the Covid-19 pandemic). Attendance at these meetings has ranged between 25 and 40 participants. Unlike the *Luso-Brazilian Meetings*, these gatherings have not produced published Proceedings. Only for the 4th Meeting extended abstracts were published as a special issue of the *Bulletin* of the SPM. We hope to continue with this format for future meetings. The venue and date for the 5th Meeting have not yet been determined, but the event is expected to be held in 2027, as we have the Luso-Brazilian meeting this year and our Spanish colleagues also have a major event in 2026.

4 CONCLUDING REMARKS

A few final notes to complement what has been said above regarding our meetings. All participants at SNHM events receive a booklet whose cover is the meeting's poster and which contains the programme, a map of the city where it is held, information about the invited speaker(s), a note on the history of the SNHM

with a list of all meetings held, including those of the Luso-Brazilian and Iberian series, and the abstracts of the communications. In most cases, this booklet has between 32 and 36 pages.

Since the 23rd Meeting, held in Évora in 2010, a *Supplement* to the *SPM Bulletin* has been produced with extended abstracts of the communications from each meeting. Each volume is between 60 and 80 pages. The SPM decided to discontinue the print edition of the *Bulletin*, and consequently of its *Supplement* as well. Issue No. 80 of December 2022 was the last to appear in print. The SNHM decided to continue producing limited print runs of the *Supplement*, funded voluntarily by meeting participants. We thus produced a print run of *Supplement* No. 82 containing the extended abstracts from the 35th and 36th Meetings (164 pages), and we are currently preparing a limited print run with the extended abstracts from the 37th and 38th Meetings. As said above, we followed the same approach for the *4th Iberian Meeting*, whose extended abstracts constitute issue No. 81 of the *SPM Bulletin* (112 pages), with printing funded by the Spanish and Portuguese participants who wished to acquire a copy. We always print a surplus of copies to supply our partner institutions, including, of course, the SPM. We understand the budgetary constraints that led to the SPM Board's decision, but we consider essential that printed copies of the *Supplement* continue to be produced.

There is much more that could be said about the activities of Portuguese historians of Mathematics and Mathematics Education during the period 1988–2025, the centres they established, the work they produced, and the meetings they organised. In the article to be published in the *Memórias da Academia das Ciências*, I develop this topic, which I have not addressed here. We maintain the same commitment to working for the research and dissemination of the history of Mathematics, including the history of Mathematics Education, with which we began the SNHM in 1988–38 years ago now. The Seminar is open to all who wish to learn and collaborate in these endeavours.

SELECTED BIBLIOGRAPHY

Anastácio da Cunha (1744–1787) — o Matemático e o Poeta – 1990. *Actas do Colóquio Internacional* (Coordinated by Ferraz, Maria de Lurdes; Rodrigues, José Francisco; and Saraiva, Luis) followed by an *anthology of texts* (Selection and introduction: Rodrigues, José Francisco; Saraiva, Luis). Lisbon: Imprensa Nacional/Casa da Moeda, Estudos Gerais, Série Universitária.

Caramalho, João. 2011. “Uma recensão italiana dos “Princípios Matemáticos” de José Anastácio da Cunha”, *Boletim da SPM*, 65, pp. 89–98.

Catálogo 23, Exposição “José Anastácio da Cunha (1744–1787) Matemático e Poeta”. 1987. (Organised by the Lisbon subcommittee for the Homage Exhibition to José Anastácio da Cunha). Lisbon: Biblioteca Nacional.

Cunha, José Anastácio da. 1987a. *Principios Mathematicos*. Facsimile reproduction of the edition published in Lisbon in 1790. Department of Mathematics, Faculty of Sciences and Technology, University of Coimbra.

Cunha, José Anastácio da. 1987b. *Principes Mathématiques de feu Joseph-Anastase da Cunha*. Facsimile reproduction of the edition published in Bordeaux in 1811. Department of Mathematics, Faculty of Sciences and Technology, University of Coimbra.

Giusti, Enrico. 1990. “Quelques Réflexions sur les ‘Principios’ de da Cunha”, in *Anastácio da Cunha (1744–1787) — o Matemático e o Poeta — Actas do Colóquio Internacional*, pp. 33–52.

Gonçalves, José Vicente. 1940. “Análise do Livro VIII dos Principios Mathematicos de José Anastácio da Cunha”, in *Actas do Congresso do Mundo Português*, vol. XII, Lisbon, pp. 123–140.

Youschkevitch, Adolph Pavlovich. 1973. “J. A. da Cunha et les fondements de l'analyse infinitesimal”, *Revue d'Histoire des Sciences*, vol. 26, pp. 3–22.