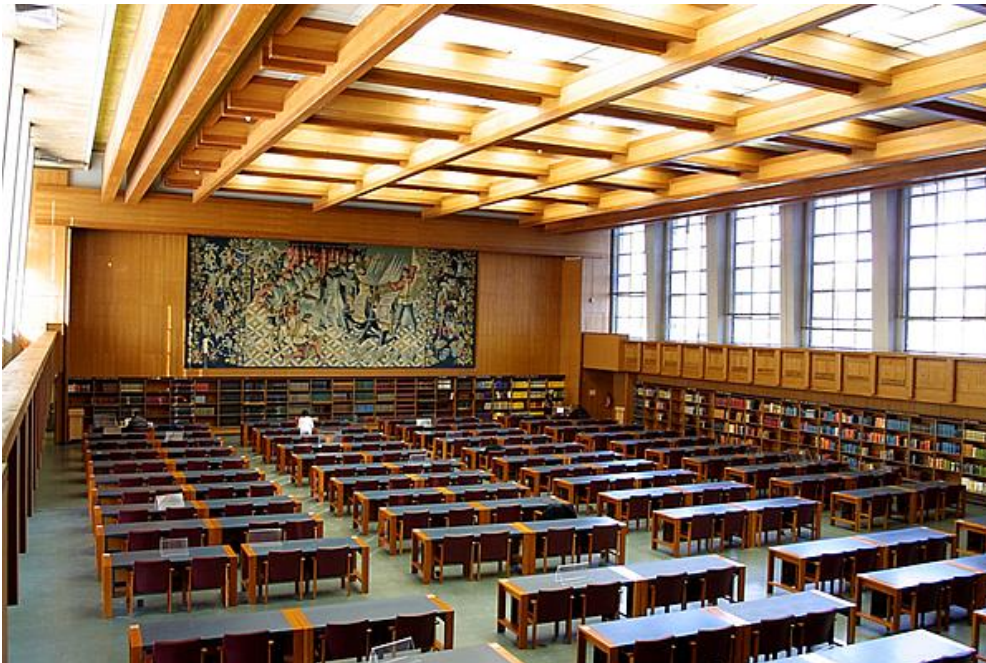


Solving puzzles:

The project *MARCMUS - Music paper and handwriting studies* and the collaboration between Music Libraries and Academia

The Music Department of the BNP (National Library of Portugal)

200,000 musical items ranging from the 13th to the 21st centuries, most of which were produced in Portugal



- **General Collections** - printed and manuscript documentation
- **Special Collections** - collections and archives from other institutions and personal collections pertaining to musicians and composers

Fundo Conde de Redondo (Count of Redondo Collection)

A very rich music collection with works ranging from the 18th to the 20th century, brought together by the **15th Count of Redondo (1797-1863)** and his son, members of one of the oldest noble families in Portugal



In the Count of Redondo's homes - the Palaces of Santa Marta, in Lisbon, and the Estate of Bom Jardim, in Belas - the intimate domestic chamber music and the sumptuous religious celebrations, where music was paramount, were common occurrences.



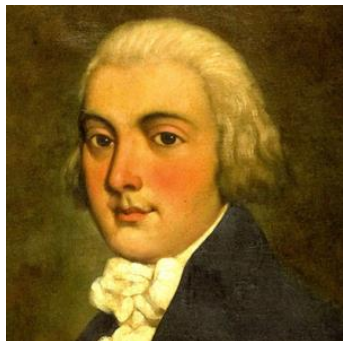
The main composers of the day - Marcos Portugal (1762-1830), António Leal Moreira (1758-1819), João José Baldi (1770-1816), Frei José Marques e Silva (1782-1837), to name just a few - were regular visitors, or were employed by the Count of Redondo, and their works, including many masses and matins, were regularly performed.



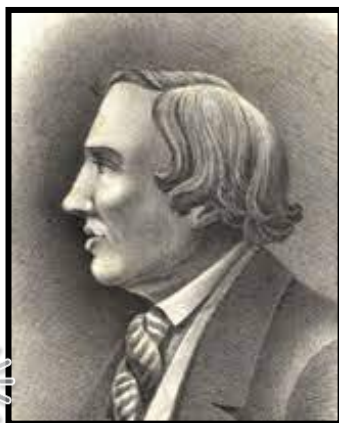
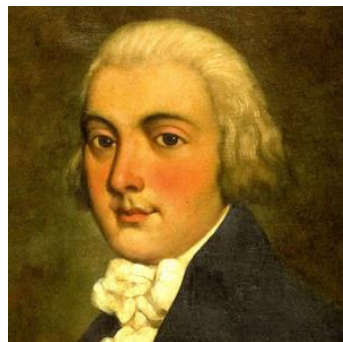
In addition to being patrons, the family members themselves were proficient in the art of music. The **15th Count of Redondo, José Luís Gonzaga de Souza Coutinho** (1797-1863) was himself a composer and a practising musician.



During and after the Portuguese civil war, opposing absolutists and liberals between 1832 and 1834, he withdrew with his family and friends, among them musicians, to his countryside house, filling the evenings and religious celebrations with concerts in which everyone took part.



Composers most represented	Number of specimens
Marcos Portugal (1762-1830)	118
Frei José Marques e Silva (1782-1837)	101
Giuseppe Totti (1751-1832)	79
Joaquim Casimiro Júnior (1808-1862)	44
Francisco A. Norberto dos Santos Pinto (1815-1860)	38
Giovanni Paisiello (1740-1816)	36
David Perez (171-1778)	29
João José Baldi (1762-1830)	24
Domenico Cimarosa (1770-1816)	20
António Leal Moreira (1758-1819)	18
Gioacchino Rossini (1792-1868)	18



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Not surprisingly, the contents of this unique music collection seem to reflect the continuous music practice and the unwavering support of musicians and composers, as it is highly representative of Portuguese music from the mid-18th century until the very end of the 19th century.

Those family traditions, as well as the enrichment of the collection, continued through the efforts of the Count's son, **Fernando Luís de Sousa Coutinho (1835-1928)**, 3rd Marquis of Borba and 16th Count of Redondo.

Quinta do Bom Jardim, 1897



Fundo Conde de Redondo (Collection of the Count of Redondo)

Musical Manuscripts in the Collection of the Count of Redondo (BNP)	1332 specimens
Portuguese composers	114 composers
Anonymous specimens	228 specimens



MARCMUS - Music paper and handwriting studies in Portugal (18th and 19th centuries): the case study of the collection of the Count of Redondo

CESEM + BNP

**Centre for the study of sociology and aesthetics of music in Nova
University of Lisbon + National Library of Portugal**



MARCMUS project



- It will systematically record and digitally preserve the **watermarks** and **paper types** (the conjunction of the watermark and the number and size of staves drawn by *rastra*) of the collection's music manuscripts.
- It will also record the literary and music **handwritings** of the copyists and composers involved.

It was through musicological source criticism that, in 2006, **Antônio Jorge Marques** identified within the **Collection of the Count of Redondo**, a once anonymous *Laudate Pueri Dominum* as an autograph by Niccolò Jommelli.



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anonymous *Laudate
Pueri Dominum* as an
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Jommelli**.



António Jorge Marques

Niccolò Jommelli's *Laudate Pueri Dominum*
from Biblioteca Nacional de Portugal

Expected outcomes of the project

- To lay the foundations for a **Music Paper and Handwriting Study Centre** housed at the **National Library of Portugal**
- To establish Portuguese source criticism on a par with international standards
- To allow through the corresponding **project site**, free access to the resulting **relational databases: watermarks, paper types and handwriting**

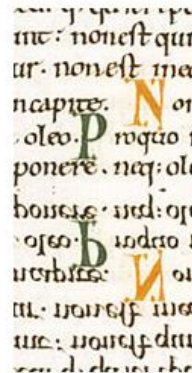
This website is about paper, paper study, and paper history. It provides various resources in the following areas: historical research of paper in Europe, expertise for paper documents, measurement of structural characteristics of paper, support for the creation of new paper databases, introduction into digital paper studies.

6th International conference on watermarks in digital collections, Bernstein meeting. Fabriano, Italy, 26-27 May 2022 ([Emanuel Wenger](#)).



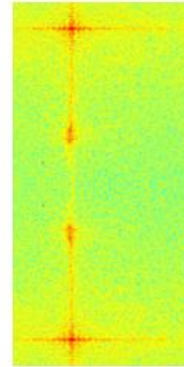
Catalogue

Search for watermarks and paper data



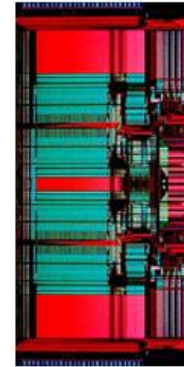
Bibliography

Bibliographic database about paper and the history of paper (provided by the German National Library, Leipzig)



Expertise

Software tools for undertaking paper expertises (image processing, measurements, dating)



Paper Study Kit

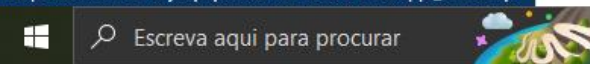
Software tools for the creation and maintenance of watermark databases; link collection



Links

A collection of links

https://www.memoryofpaper.eu/BernsteinPortal/appl_start.disp#



The **watermark and paper type database** will also become available at the **Bernstein Project: the Memory of Paper**, the largest international project of its kind (in 10 languages) which includes 50 collections and more than 270,000 researchable watermarks (www.memoryofpaper.eu).

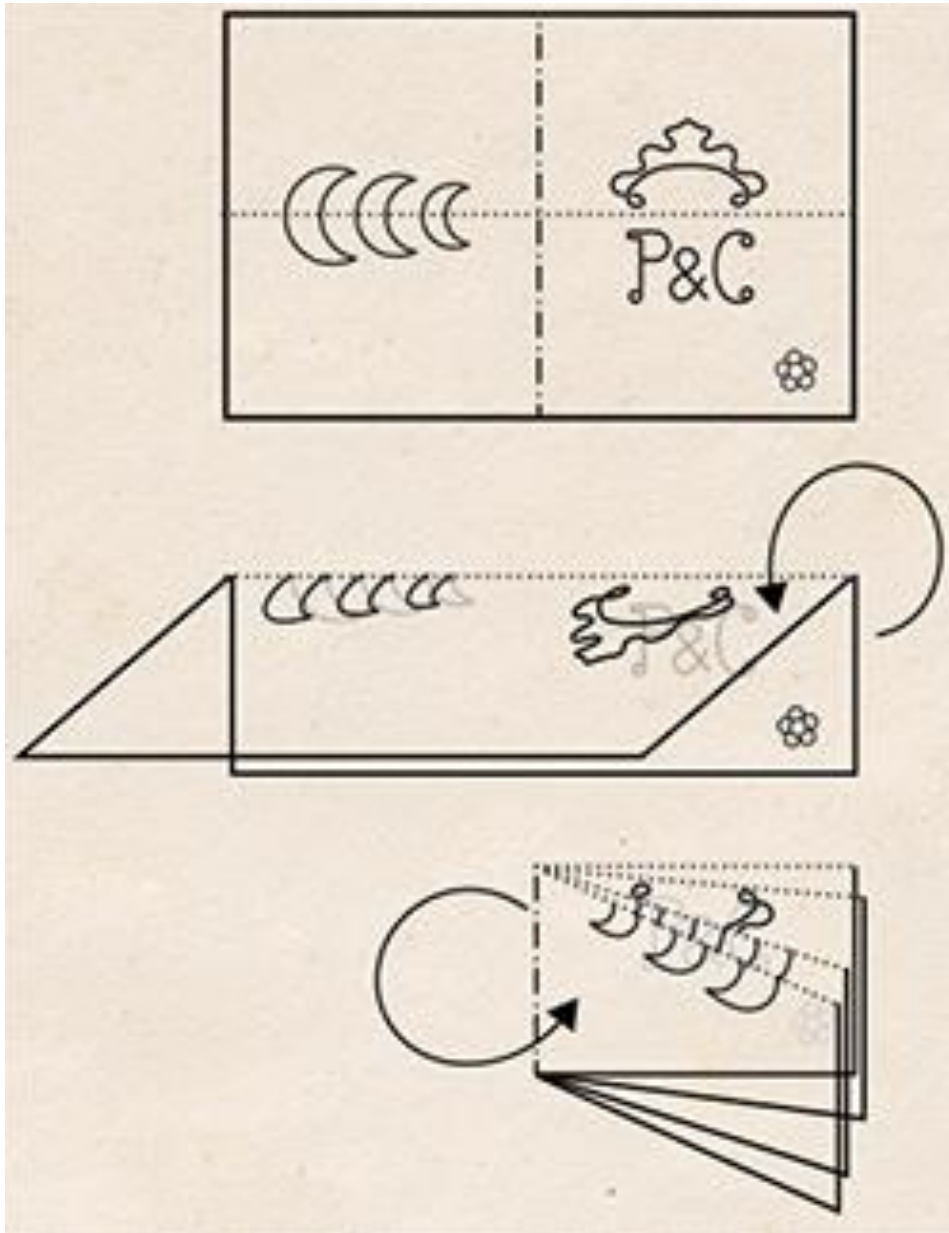
Scientific component of MARCMUS project

- Since the late 1950s, when Alfred DÜRR (1957) thoroughly revised the dating of Bach's cantatas through a detailed comparison of watermarks, source criticism has all but revolutionised the way in which scholars examine music scores
- **If the watermark study is complemented by stave ruling dimensions and the identification of calligraphies**, the precision – and therefore the usefulness – of the findings will be greatly enhanced.

- The correlation between the **watermarks, paper types and handwritings of composers/copyists** will be a powerful research tool and will yield results as far as the date, origin and affiliation of the music manuscripts are concerned.
- It is expected that **quite a few of the 228 anonymous works** belonging to the collection of the Count of Redondo will be **identified/dated**, as in the case of the once anonymous Jommelli *Laudate pueri* autograph (MARQUES, 2021).

Methods applied in MARCMUS projec

- Traditional methods used by musicologists for imaging watermarks are problematic (freehand tracing; Dylux method ; beta-radiography; low voltage x-rays)
- **Digital photography** is not only practical (and not time-consuming) and rigorous but also **less invasive** as far as paper conservation is concerned
- Each folio is lit from behind and a digital photograph taken
- Four pictures are taken



For most music manuscripts a whole sheet of paper was folded and cut on the long axis, and then folded and cut again on the short axis. This resulted in **4 folios**, where both watermark (WM) and countermark (CM) have (usually) been cut in half.

This means that **4 photos need to be taken and processed** – using Photoshop – so that both halves of the sheet can be reconstructed.



Using Photoshop, both halves of the sheet are reconstructed, creating high quality images where **WM, CM and chain lines** (as well as laid-lines) **are clearly visible and measurable** (in centimetres/millimetres).



A problem lies in the writing and staves: they tend to obscure both the WM and the CM.

These problems will be overcome with the subtraction method: two pictures will be taken, one with incident light and the other with transmitted light (from behind). The first will then be subtracted from the second using a software called MATLAB; the final stages of post-production will use PhotoShop.

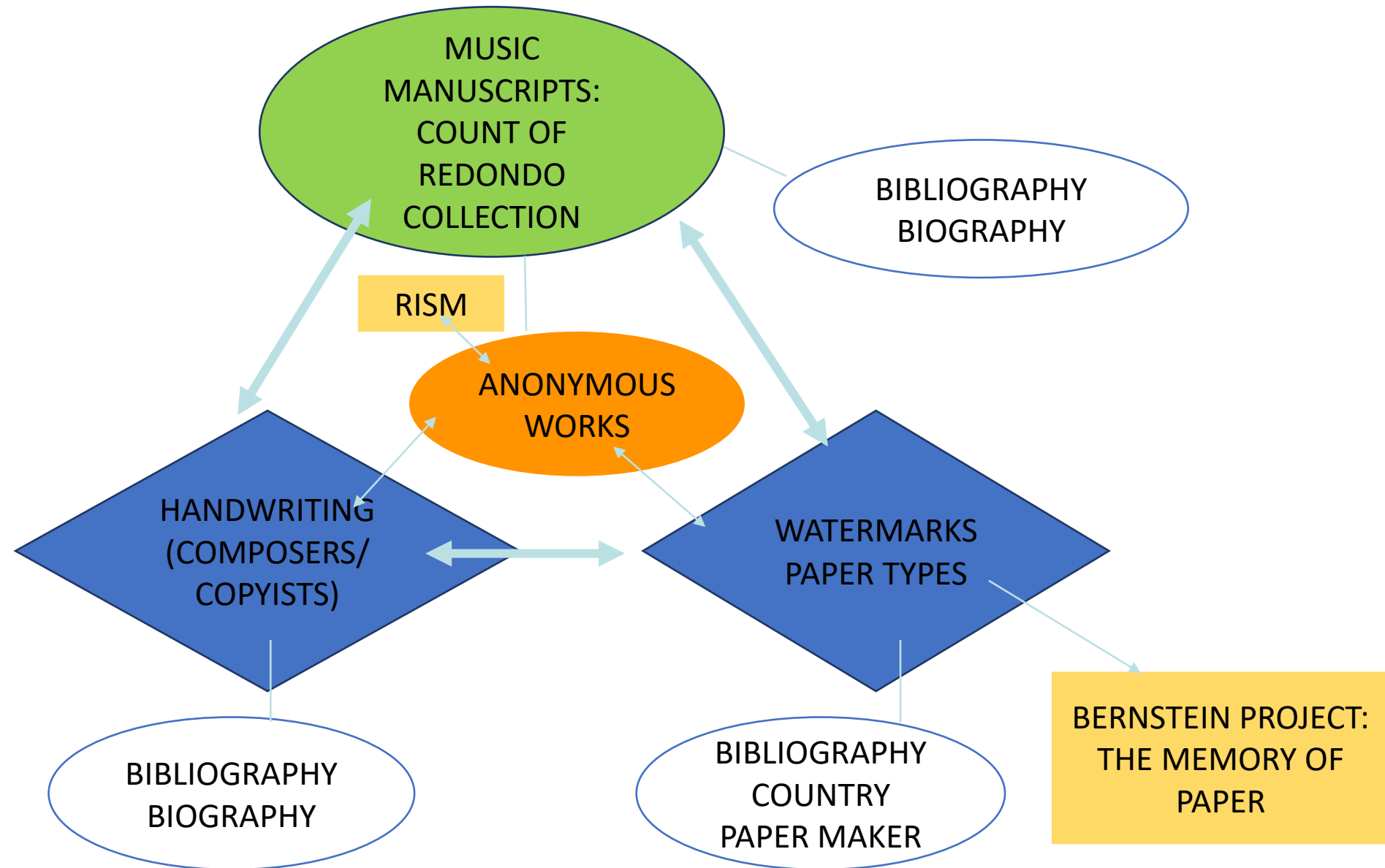
MarcMus Project

CESEM Team		BNP Music Department Team	
António Jorge Marques	Principal Investigator	Isabel Novais	Musicologist
Andrew Woolley	Co-Principal Investigator	Sílvia Sequeira	
João Pedro d’Alvarenga	Investigator	Sílvia Antunes	Library technician
Rui Araújo		Susana José	
Zuelma Chaves		João Amaral	
Eva Mathilde Ribeiro	Research fellowship		
Lívia Pombal (and a second student in 2023)	Studentship (scientific initiation)		
Maria José Ferreira dos Santos	Consultant (International Association of Paper Historians / Bernstein Project / Asociación Hispánica de Historiadores del Papel)		
Emanuel Wenger			
Maria del Carmen Hidalgo Brinquis			
Pedro Sousa	Invited IT engineer		

Tasks involved in the execution of this project

Nº	Task denomination	Responsible team	Partners involved	Timeline
1	Kik-off Workshop Marcmus: Paper and handwriting studies	CESEM	BNP, CESEM	February 22
2	Preparation for digitalization of the Collection Count of Redondo	BNP	BNP	March – April 22
3	Digital photographing of the manuscripts	BNP	BNP	May – June 22
4	Preparation for digitalization of watermarks and handwriting; rastrology	CESEM	CESEM	January – November 22
5	Digital photographing of watermarks and handwriting; rastrology	CESEM	CESEM	June 22 – July 23
6	Processing digital images	CESEM	CESEM	June 22 – July 23
7	Project website and databases	CESEM	CESEM, BNP	May 22 – August 23
8	Dissemination and colloquium	CESEM	CESEM, BNP	August – November 23
9	Exporting watermar /papertype databases to the <i>Bernstein Project: The Memory of Paper</i>	CESEM	CESEM	May – August 23
10	Updating BNP's catalogue for the Collection of the Count of Redondo	BNP	BNP, CESEM	May – June 23 and forward

MUSIC PAPER AND HANDWRITING STUDIES IN PORTUGAL (18TH AND 19TH CENTURIES)



Solving puzzles:

the project *MARCMUS - Music paper and handwriting studies* and the collaboration between Music Libraries and Academia



António Jorge Marques | Isabel Novais | Sílvia Sequeira
IAML, Prague, 2022

Contacts

António Jorge Marques:

`ajmarques@fcsh.unl.pt`

Biblioteca Nacional de Portugal - Music Department:

`musica@bnportugal.gov.pt`

CESEM / UNL:

`cesem@fcsh.unl.pt`

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