

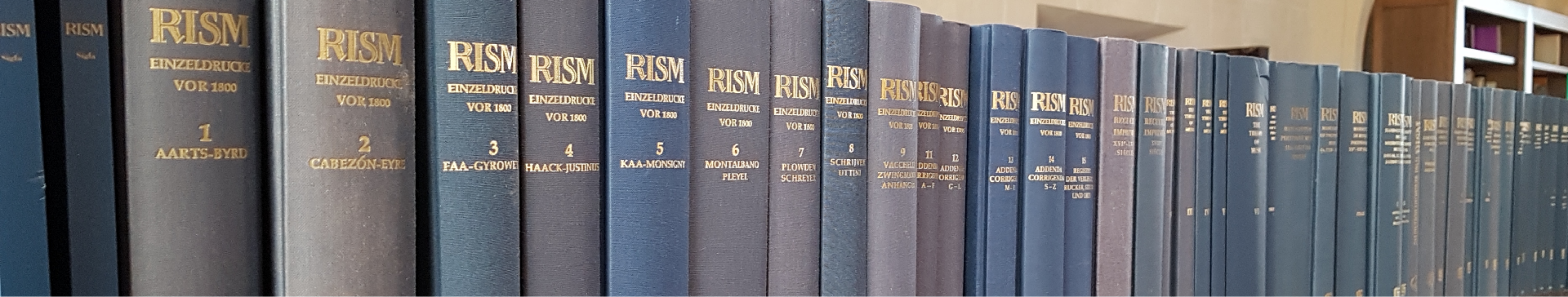
LinkedMusic Workshop I

Music Databases

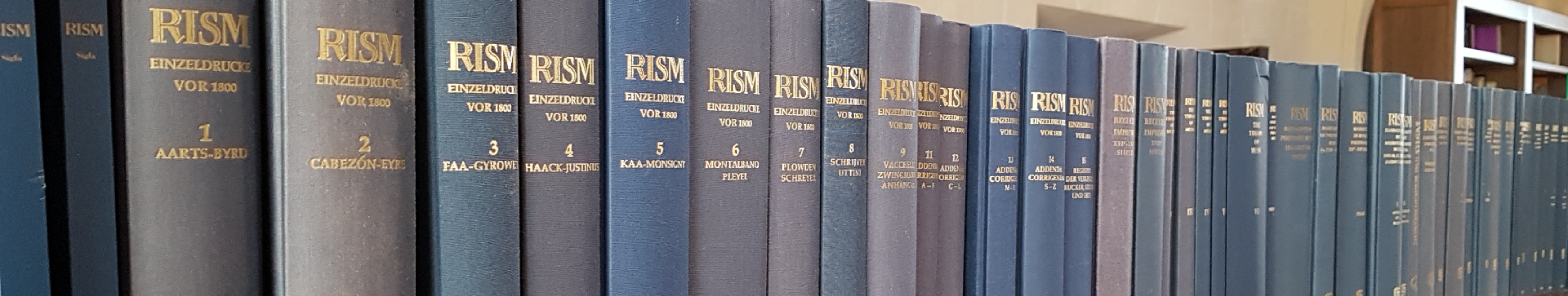
CIRMMT Research Axis 2 – Music Information Research
Montreal, 18th November 2022

Laurent Pugin





What is the RISM ?



- 70 years of music source cataloguing under the auspices of IMS and IAML
- Some cataloguing working groups in more than 30 countries
- An Editorial Center supervising cataloguing and coordinating activities with partner institutions
 - Bavarian State Library (OPAC) and Berlin State Library (Server hosting)
- A Digital Center acting as the central hub for information technology questions
 - Muscat – Verovio – RISM Online



Cataloguing

Publishing



1952 – Set up of the IMS and IAML Commission Mixte and elaboration of a master plan

1960 / 1964 – B/I and B/II: Recueils imprimés 16^e-17^e et 18^e siècles
1971 / 1981 – A/I: Einzeldrucke vor 1800 (9 plus 4 additional volumes)



1973 – Establishment of the cataloguing of manuscripts (series A/II)

1975 – Initial steps for cataloguing on a mainframe computer

1984 – First microfiche edition of series A/II (~19,000 ms)

1986 – Second microfiche edition of series A/II



1990 – PiKaDo MS-DOS application to catalog locally

1995 / 2008 – CD-ROM of series A/II (~160,000 ms) with annual updates

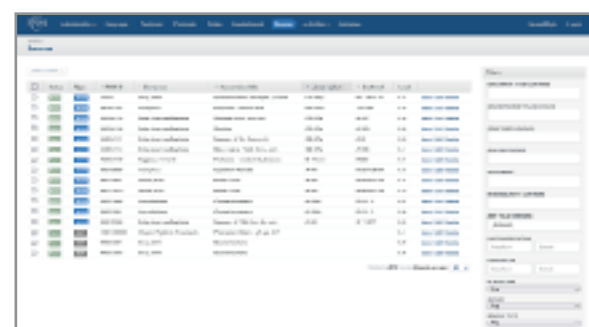
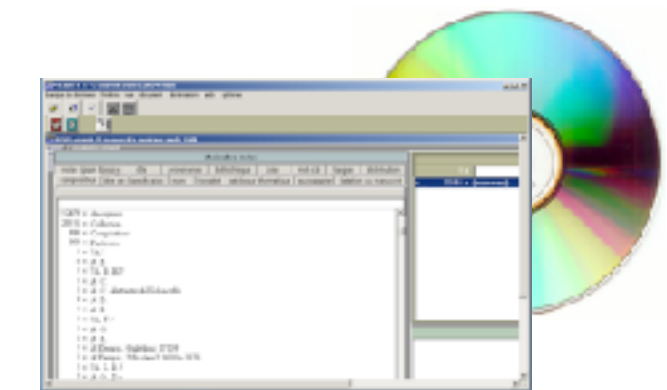
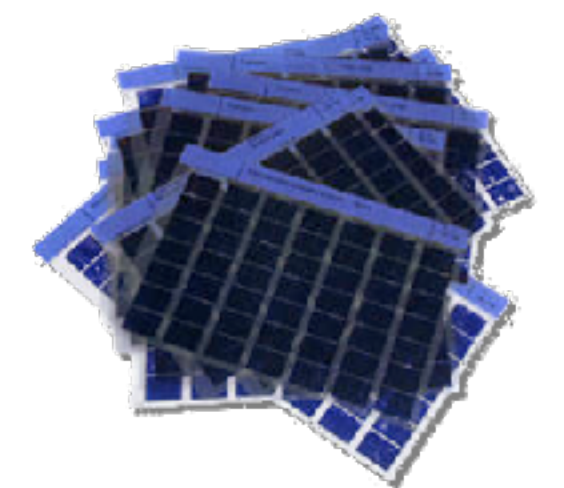


2006 – Kallisto Windows desktop application to catalog remotely

2010 – Launch of the RISM Catalog (OPAC) by the Bavarian State Library

2016 – Migration to Muscat (web-app) to catalog through a web-browser

2022 – Launch of RISM Online by the RISM Digital Center



RISM Database

- Maintained in Muscat since 2016 (100 active cataloguers) and based on MARC21
- Scope
 - Series A/II: Music manuscripts after 1600
 - Series A/I: Individual prints before 1800
 - Series B/I and B/II: Recueils imprimés 16^è-17^è et 18^è siècles
- Content
 - 1,590,000 source descriptions (manuscript and printed sources)
 - 1,900,000 music incipits in Plaine and Easie code
 - 160,000 people - with direct contribution to VIAF
 - 27,000 institutions - with about 9,000 RISM Sigla

From Muscat to RISM Online

<https://rism.online>

- Responds to a need for more direct and granular access to RISM data
- Interface directly with Muscat - same database, same data, same translations
- Intended to support research data partnerships with other musicological projects
- Stable, clear, citeable and authoritative URIs (\neq permalink) for each entity in the dataset (sources, people, institutions)
- Integration with ontology efforts for Linked Data in music and bibliography (JSON-LD)
- Integration with other resources (e.g., DIAMM)

Front Page, Initial Search

The screenshot shows the RISM Online search interface. The browser address bar displays "rism.online/?mode=sources". The page features a search bar with the text "Words anywhere" and a "Number of results: 1,396,882" indicator. Below the search bar is a section titled "Sources" with a list of filters:

- Results included
- Source to person relationships
- Digital facsimiles
- Incipits
- Source contents
- Publication and production
- Holding institutions

The background of the page is a musical score with handwritten notation and lyrics, including the words "e tu la mi:" and "Primache".

Front Page, Initial Search

The screenshot shows the RISM Online search interface. At the top, the browser address bar displays "rism.online/?mode=sources". The page features a search bar with the text "Words anywhere" and a "Reset all" button. Below the search bar, the text "Number of results: 1,396,882" is visible. The main content area is titled "Sources" and contains a list of search record types, each with a blue circular icon and a right-pointing arrow:

- Results included
- Source to person relationships
- Search Record Types**
Sources, People, Institutions, Incipits
- Incipits
- Source contents
- Publication and production
- Holding institutions

The background of the page is a faded image of a musical score with handwritten notes and lyrics, including the words "e tu la mi:" and "Primache".

Front Page, Initial Search

The screenshot displays the RISM Online search interface. At the top, the browser address bar shows 'rism.online/?mode=sources'. The page features a search bar with the text 'Words anywhere' and a 'Reset all' button. Below the search bar, a box indicates 'Number of results: 1,396,882'. The main content area is titled 'Sources' and contains a list of filter options under the heading 'ADDITIONAL FILTERS'. The filters include: Results included, Source to person relationships, Digital facsimiles, Incipits, Source contents, Publication and production, and Holding institutions. A callout box with a black border and white background is positioned over the search bar, containing the text 'Record Search Interfaces' and 'Different Options for each Record Type'. The background of the page is a faded image of a musical score with handwritten notes and lyrics, including the words 'e tu la mi:' and 'Primache'.

Record Search Interfaces
Different Options for each Record Type

Front Page, Initial Search

The screenshot displays the RISM Online search interface. At the top, the browser address bar shows 'rism.online/?mode=sources'. The page features a navigation sidebar on the left with icons for home, search, and other functions. The main content area is titled 'Incipits' and includes a search bar with 'Show all records' and 'Reset all' buttons, and a result count of 'Number of results: 2,275,996'. Below the search bar, there are dropdown menus for 'Clef' (set to G-2 (treble clef)), 'Time signature' (set to None), and 'Key signature' (set to None). A musical staff with a treble clef is shown next to these options. A keyboard diagram is displayed below the filters, with labels C3, C4, and C5. The 'Plaine and Easie Input' section contains a text input field and a 'Query mode' dropdown set to 'Intervals'. A link for 'Show Incipit Search Help' is also present. The 'ADDITIONAL FILTERS' section includes a 'Keyword query' input field with the text 'Words anywhere' and two filter options: 'Clef, key signature, time signature' and 'Composer and composition'. A callout box on the right side of the interface reads 'Record Search Interfaces' and 'Different Options for each Record Type'. The background of the page features a faint image of a musical manuscript with handwritten notes and the word 'Primache'.

Search Results, Result Filtering

The screenshot shows the RISM online search interface. At the top, the browser address bar displays 'rism.online/search'. The RISM logo is on the left. The search results are categorized by type: Sources (1,396,788), People (136,862), Institutions (26,179), and Incipits (2,275,996). The results are sorted by 'Most relevant' and 20 items are shown per page. The total number of results is 1,396,788. A 'Keyword query' box contains the text 'Words anywhere'. On the right, a list of filters is shown, including 'Results included', 'Source to person relationships', 'Digital facsimiles', 'Incipits', 'Source contents', 'Publication and production', and 'Holding institutions'. The main results list shows five entries, each with a title, author, date, and a 'Has digitalization' tag. The page number is 1 of 69,840.

Search RISM
rism.online/search

Result type Sources (1,396,788) People (136,862) Institutions (26,179) Incipits (2,275,996)

Sort by Most relevant Rows per page 20 Update search results Reset all Number of results: 1,396,788

2 Motets; Manuscript copy; D-DI Mus.1504-E-502
Graziani, Bonifazio Graziani, Bonifazio (1605-1664)
1589 (1589c) 2 Items in this source
Has digitalization

2 Sacred songs; Manuscript copy; D-DI Mus.1720-E-502 [score]
Anonymus; Hammerschmidt, Andreas
1737-1752 2 Items in this source
Has digitalization

2 Motets; Manuscript copy; D-DI Mus.1720-E-503
Hammerschmidt, Andreas Hammerschmidt, Andreas (1611c-1675)
1717 2 Items in this source
Has digitalization

2 Sacred songs; Manuscript copy; D-DI Mus.2-E-644
Anonymus
1750-1800 (18.2d) 2 Items in this source
Has digitalization

2 Sacred songs; Manuscript copy; D-DI Mus.2-E-29
Anonymus
1550-1685 2 Items in this source

Keyword query
Words anywhere

ADDITIONAL FILTERS

- Results included
- Source to person relationships
- Digital facsimiles
- Incipits
- Source contents
- Publication and production
- Holding institutions

Page 1 / 69,840

Search Results, Result Filtering

The screenshot displays the RISM online search interface. The browser address bar shows `rism.online/search`. The RISM logo is in the top left. The search results are sorted by "Most relevant" and show 1,396,788 results. The results list includes:

- 2 Motets; Manuscript copy; D-DI Mus.1504-E-502**
Graziani, Bonifazio (1605-1664)
1589 (1589c) 2 Items in this source
Has digitization
- 2 Sacred songs; Manuscript copy; D-DI Mus.1720-E-502 [score]**
Anonymus; Hammerschmidt, Andreas
1737-1752 2 Items in this source
Has digitization
- 2 Motets; Manuscript copy; D-DI Mus.1720-E-503**
Hammerschmidt, Andreas (1611c-1675)
1717 2 Items in this source
Has digitization
- 2 Sacred songs; Manuscript copy; D-DI Mus.2-E-644**
Anonymus
1750-1800 (18.2d) 2 Items in this source
Has digitization
- 2 Sacred songs; Manuscript copy; D-DI Mus.2-E-29**
Anonymus
1550-1685 2 Items in this source

The right sidebar contains filtering options:

- Update search results
- Reset all
- Number of results: 1,396,788
- Keyword query: Words anywhere
- ADDITIONAL FILTERS
- Results included
- Source to person relationships
- Source contents
- Publication and production
- Holding institutions

A callout box highlights the search results area with the text: "Search Results List Your results appear here".

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Search Results, Result Filtering

The screenshot shows the RISM search results page. At the top, the search bar contains the text "Search RISM" and the URL "rism.online/search". Below the search bar, the "Result type" section shows "Sources (1,396,788)" selected, along with "People (136,862)", "Institutions (26,179)", and "Incipits (2,275,996)".

The main content area is divided into two columns. The left column displays search results, including:

- 2 Motets; Manuscript copy; D-DI Mus.1504-E-502 (Graziani, Bonifazio, 1605-1664, 1689)
- 2 Sacred songs; Manuscript copy; D-DI Mus.1720-E-502 [score] (Anonymus; Hammerschmidt, Andreas, 1737-1752)
- 2 Sacred songs; Manuscript copy; D-DI Mus.2-E-644 (Anonymus, 1750-1800)
- 2 Sacred songs; Manuscript copy; D-DI Mus.2-E-29 (Anonymus, 1550-1685)

The right column contains the "Keyword query" section with the text "Words anywhere" and a list of "ADDITIONAL FILTERS":

- Results included
- Source to person relationships
- Digital facsimiles
- Incipits
- Source contents
- Publication and production
- Holding institutions

A callout box with a black border and white background is overlaid on the left column, containing the text:

Results Filters
Change Options Here and Update Results

At the bottom of the page, the pagination information shows "Page 1 / 69,840".

Search Results, Result Filtering

The screenshot displays the RISM online search interface. At the top, the browser address bar shows "rism.online/search". The RISM logo is on the left. The main header area includes "Result type" with filters for Sources (1,396,788), People (136,862), Institutions (26,179), and Incipits (2,275,996). Below this, there are controls for "Sort by Most relevant", "Rows per page 20", and buttons for "Update search results" and "Reset all". The "Number of results: 1,396,788" is displayed on the right. A search bar contains the text "Wo". A white box with a black border highlights the text "Result Number Preview" and "Number of results that will be found". Below the search bar is a section for "ADDITIONAL FILTERS" with a list of filter categories: Results included, Source to person relationships, Digital facsimiles, Incipits, Source contents, Publication and production, and Holding institutions. The main content area shows a list of search results, each with a title, author, date, and a "Has digitalization" button. The footer shows "Page 1 / 69,840" and navigation arrows.

Search RISM

rism.online/search

RISM

Result type Sources (1,396,788) People (136,862) Institutions (26,179) Incipits (2,275,996)

Sort by Most relevant Rows per page 20 Update search results Reset all Number of results: 1,396,788

Keyword search

Wo

Result Number Preview
Number of results that will be found

ADDITIONAL FILTERS

- Results included
- Source to person relationships
- Digital facsimiles
- Incipits
- Source contents
- Publication and production
- Holding institutions

2 Motets; Manuscript copy; D-DI Mus.1504-E-502
Graziani, Bonifazio Graziani, Bonifazio (1605-1664)
1589 (1589c) 2 Items in this source
Has digitalization

2 Sacred songs; Manuscript copy; D-DI Mus.1720-E-502 [score]
Anonymus; Hammerschmidt, Andreas
1737-1752 2 Items in this source
Has digitalization

2 Motets; Manuscript copy; D-DI Mus.1720-E-503
Hammerschmidt, Andreas Hammerschmidt, Andreas (1611c-1675)
1717 2 Items in this source
Has digitalization

2 Sacred songs; Manuscript copy; D-DI Mus.2-E-644
Anonymus
1750-1800 (18.2d) 2 Items in this source
Has digitalization

2 Sacred songs; Manuscript copy; D-DI Mus.2-E-29
Anonymus
1550-1685 2 Items in this source

Page 1 / 69,840

Record Details

The screenshot shows a web browser window with the RISM logo and the title 'Z domoviny; Autograph manuscript; CZ-Pu 59 R 107'. The page is divided into several sections: 'Title and content description', 'Material description', and 'Relations'. A callout box on the right points to the 'Title and content description' section, labeling it as the 'Source Description' and 'The full record view'. The 'Title and content description' section includes fields for Composer/Author (Smetana, Bedřich), Type (Autograph manuscript), Standardized title (Z domoviny), Title on source (a detailed title page transcription), Additional title (Aus der Heimat), Description summary (2 duets), Scoring summary (vl, pf), and RISM ID number (550509313). The 'Material description' section includes Group 01, Type (Autograph manuscript), Date (1880), Format (score: 8f.), Dimensions (26 x 33 cm), and a General note (Last folio is blank). The 'Relations' section lists a dedicatee (Thurn-Taxis, Johann Vincent Alexander de). At the bottom, there is a Record URI (Permalink) and Muscat options (View | Edit), along with creation and modification dates.

Source Description
The full record view

Title and content description

Composer/Author	Smetana, Bedřich (1824-1884) [Verified]
Type	Autograph manuscript
Standardized title	Z domoviny
Title on source	[title page:] Jeho Jasnosti Alexandrovi knížeti z Thurnů a Taxisů. Z domoviny. Dvě duetta pro housle a piano složil Bedřich [crossed out by ink:] Smetana Čís: 1. A dur Čís: 2. G Moll. [parallel text in german:] S r Durchlaucht Alexander Prinzen von Thurn und Taxis. Aus der Heimath Zwei Duette für Violine und Piano von Bedřich Smetana. [later crossed out by ink:] N r o 1 A dur N r o 2 G Moll.
Additional title	Aus der Heimat
Description summary	2 duets
Scoring summary	vl, pf
RISM ID number	550509313

Material description

Group 01	
Type	Autograph manuscript
Date	1880 (1880c)
Format, extent	score: 8f.
Dimensions	26 x 33 cm
General note	Last folio is blank. Some folios missing.

Relations

Dedicatee	Thurn-Taxis, Johann Vincent Alexander de (1851-1939) [Verified]
-----------	---------------------------------------------------------------------------------

Record URI (Permalink): <https://rism.online/sources/550509313>
Muscat: [View](#) | [Edit](#)

Created on: November 10th, 2011
Last modification: January 16th, 2020

Record Details

Z domoviny; Autograph manuscript; CZ-Pu 59 R 107
Description Source contents (2)

Record Title and View Switcher
Show description or source contents

Title and content

Composer/Author	
Type	
Standardized title	Z domoviny
Title on source	[title page:] Jeho Jasnosti Alexandrovi knížeti z Thurnů a Taxisů. Z domoviny. Dvě duetta pro housle a piano složil Bedřich [crossed out by ink:] Smetana Čís: 1. A dur Čís: 2. G Moll. [parallel text in german:] S r Durchlaucht Alexander Prinzen von Thurn und Taxis. Aus der Heimath Zwei Duette für Violine und Piano von Bedřich Smetana. [later crossed out by ink:] N r o 1 A dur N r o 2 G Moll.
Additional title	Aus der Heimat
Description summary	2 duets
Scoring summary	vl, pf
RISM ID number	550509313

Material description

Group 01	
Type	Autograph manuscript
Date	1880 (1880c)
Format, extent	score: 8f.
Dimensions	26 x 33 cm
General note	Last folio is blank. Some folios missing.

Relations

Dedicatee	Thurn-Taxis, Johann Vincent Alexander de (1851-1939) [Verified]
-----------	---------------------------------------------------------------------------------

Record URI (Permalink): <https://rism.online/sources/550509313>
Muscat: [View](#) | [Edit](#)

Created on: November 10th, 2011
Last modification: January 16th, 2020

Record Details

The screenshot shows a web browser window displaying the RISM online interface. The main content area features a list of records. The first record is highlighted, and a callout box points to its title and view options. The callout box contains the text: "Record Title and View Switcher Show description or source contents".

Record Title and View Switcher
Show description or source contents

Record Details:
Z domoviny; Autograph manuscript; CZ-Pu 59 R 107
Description: [Source contents \(2\)](#)

Search and Filters:
Reset all | Number of results: 2
Words anywhere
ADDITIONAL FILTERS
Results included:
 Hide source contents ⓘ
 Hide collection records ⓘ
 Hide composite volumes ⓘ

Source to person relationships
Digital facsimiles
Incipits
Source contents

Page 1 / 1

Record URI (Permalink): <https://rism.online/sources/550509313>
Muscat: [View](#) | [Edit](#)

Created on: November 10th, 2011
Last modification: January 16th, 2020

Record Details

The screenshot displays the RISM online interface for a specific record. The browser address bar shows the URL `rism.online/sources/550509313/contents`. The main header identifies the record as "Z domoviny; Autograph manuscript; CZ-Pu 59 R 107" with a description of "Source contents (2)".


On the left, a vertical navigation menu includes icons for home, search, and other functions. The main content area lists two identical entries for "Duets; Autograph manuscript; CZ-Pu 59 R 107" by Smetana, Bedřich (1824-1884), dated 1880 (1880c). Each entry is noted as "Part of Z domoviny - vl, pf" and "Has incipits".

On the right, a search and filter panel is visible. It includes buttons for "Update search results" and "Reset all", and indicates "Number of results: 2". The search query is "Words anywhere". Under "ADDITIONAL FILTERS", there are options for "Results included" (Hide source contents, Hide collection records, Hide composite volumes), "Source to person relationships", "Digital facsimiles", "Incipits", and "Source contents".

At the bottom, the page number is "Page 1 / 1". The footer contains the Record URI (Permalink): `https://rism.online/sources/550509313`, Muscat: View | Edit, and creation/modification dates: Created on: November 10th, 2011; Last modification: January 16th, 2020.


Source Contents Search
Dedicated search for source contents
Also dedicated source search for People,
Institutions

<https://rism.online/sources/550508879>

 2 Overtures - Arr; pf 4hands; Manuscript copy; CZ-Pu 59 R 2750

[Description](#) [Source contents \(2\)](#)

Title and content description

Composer/Author	 Mozart, Wolfgang Amadeus (1756-1791) [Ascertained]
Type	Manuscript copy
Title on source	[without title]
Standardized title	2 Overtures; Arrangement; pf 4hands
Total scoring	pf 4hands (1)
RISM ID number	550508879

Material description

Type	Manuscript copy
Date	1825 (1825c)
Format, extent	part
Dimensions	23,5 x 30,5 cm
Parts held	pf 4hands
General note	Folios 15-34 blank.

References and notes

General note	Folios 15-34 blank.
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text/html

The URL in the address bar is to be used:

- as a citation and for sharing the resource
- for data references (via "Content Negotiation")

```
JSON
Raw

@context: "https://rism.online/api/v1/context.json"
id: "https://rism.online/sources/550508879"
type: "rism:Source"
typeLabel: Object { pt: [...], pl: [...], es: [...], ... }
  pt: [ "Fonte" ]
  pl: [ "Źródło" ]
  es: [ "Fuente" ]
  fr: [ "Source" ]
  it: [ "Fonte" ]
  en: [ "Source" ]
  de: [ "Quelle" ]
label: Object { none: [...] }
  none: [ "2 Overtures - Arr; pf 4hands; Manuscript copy; CZ-Pu 59 R 2750" ]
creator: Object { type: "rism:Relationship", role: {...}, qualifier: {...}, ... }
  type: "rism:Relationship"
  role:
  qualifier:
  relatedTo: Object { id: "https://rism.online/people/115324", type: "rism:Person", label: {...} }
record: Object { recordType: {...}, sourceType: {...}, contentTypes: [...] }
  recordType: Object { type: "rism:CollectionRecord", label: {...} }
  sourceType: Object { type: "rism:ManuscriptSource", label: {...} }
  contentTypes: [ {...} ]
recordHistory: Object { type: "rism:RecordHistory", created: "2011-06-27T00:00:00Z", updated: "2020-11-20T11:11:20Z", ... }
  type: "rism:RecordHistory"
  createdLabel: Object { pt: [...], pl: [...], es: [...], ... }
  updatedLabel: Object { pt: [...], pl: [...], es: [...], ... }
  created: "2011-06-27T00:00:00Z"
  updated: "2020-11-20T11:11:20Z"
contents: Object { id: "https://rism.online/sources/550508879/contents", label: {...}, summary: [...] }
  id: "https://rism.online/sources/550508879/contents"
  label: Object { pt: [...], pl: [...], es: [...], ... }
  summary: [ {...}, {...}, {...}, {...}, {...} ]
```

application/ld+json

Lessons and hopes

There are some limits with what we can offer through the search interface

- Pushing it too far will make it too specialised or too complicated to use
- Having “just” a search interface is not enough to perform complex queries

RISM Online will facilitate:

- Data mining – RISM is not only an inventory to be searched from a web-interface
- Data-linking – RISM URIs can be used for referencing and in linked-data sets

Thank you

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<https://rism.digital> <https://rism.online>

