

# Beethoven in the House

## *Digital Studies of Domestic Music Arrangements*

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**BTHVN** BEETHOVEN-HAUS  
**2020** BONN



# **Beethoven in the House**

## *Digital Studies of Domestic Music Arrangements*

1. Motivations (CS)
2. Project Approach (KP)

# Motivation - Domestic Music Arrangements in the 19th Century



George Hamilton Barrable, <https://commons.wikimedia.org/w/index.php?curid=6904104>



Silvestro Lega, <https://commons.wikimedia.org/w/index.php?curid=1549934>



Pierre-Auguste Renoir, <https://commons.wikimedia.org/w/index.php?curid=21857233>

## Two perspectives:

*1) A study of Steiner editions of Beethoven's 7th and 8th Symphonies and Wellingtons Sieg will make a detailed comparison between arrangements, systematically identifying a core common to multiple versions, and asking if this reflects the stated values of the publisher.*

*2) A survey for patterns of arrangement across a larger sample of lesser-known and often poorly catalogued scores, collating emergent indicators of arrangers' motivations within a narrative of the domestic market - the music industry of its day.*

# Motivation - A study of Beethoven arrangements using digital encodings

Sigmund Anton Steiner



Frühdruck, op. 91, Bearbeitung für 2 Klaviere, Steiner, 2362, C 91 / 8



Frühdruck, op. 92, Bearbeitung für 2 Oboen, 2 Klarinetten, 2 Hörner, 2 Fagotte und Kontrafagott, Stimmen, Steiner, 2563, C 92 / 10



Frühdruck, op. 92, Bearbeitung für 2 Violinen, 2 Violoncello, Stimmen, Steiner, 2564, C 92 / 23



Frühdruck, op. 92, Bearbeitung für Violine, Violoncello und Klavier, Stimmen, Steiner, 2565, C 92 / 30



Frühdruck, op. 92, Bearbeitung für Klavier zu 4 Händen von Anton Diabelli, Steiner, 2566, C 92 / 27



Frühdruck, op. 93, Bearbeitung für 2 Violinen, 2 Violoncello, Stimmen, Steiner, 2574, C 93 / 26



Frühdruck, op. 93, Bearbeitung für Klavier zu 4 Händen, Steiner, 2576, C 93 / 16



Frühdruck, op. 93, Bearbeitung für 2 Klaviere von Carl Czerny, Steiner, 2578, C 93 / 21

## Two perspectives:

*1) A study of Steiner editions of Beethoven's 7th and 8th Symphonies and Wellingtons Sieg will make a detailed comparison between arrangements, systematically identifying a core common to multiple versions, and asking if this reflects the stated values of the publisher.*

*2) A survey for patterns of arrangement across a larger sample of lesser-known and often poorly catalogued scores, collating emergent indicators of arrangers' motivations within a narrative of the domestic market - the music industry of its day.*

# Motivation - A study of musicological patterns in domestic arrangements

The screenshot displays the SOLO Search Oxford Libraries Online interface. The header includes the SOLO logo, the University of Oxford crest, and navigation links: NEW SEARCH, BROWSE, MAP SEARCH, HELP, TAGS. A search bar contains the text 'Beethoven' with a 'Search Everything' button and an 'ADVANCED SEARCH' link. Below the search bar, a yellow banner prompts users to 'Sign in to get complete results and to request items' with 'Sign In' and 'DISMISS' options. A 'LIVE CHAT' button is visible on the right side.

**Active filters:**

- Piano music, Arranged X
- Piano music (4 hands), Arran... X
- Years: Years: 1800-1900-und... X
- Scores X
- Remember all filters
- Reset filters

**Sort & Filter Results:**

- ☒ Include results without full-text access
- Sort by: Relevance
- Show only: Physical Resources (43)
- Library
- Creator
- Publication Date
- Topic
- Language

**Search Results:**

0 selected PAGE 1 43 Results

- SCORE

**Album-Beethoven : dix morceaux brillants pour le piano**

[1842] | Vienne : Pietro Mechetti qm Carlo | 1 v. of music (various pagings) : ill. ; 33 cm

Find & Request >
- SCORE

**Album-Beethoven : dix morceaux brillants pour le piano**

[1841] | Vienne : Pietro Mechetti qm Carlo | 1 v. of music (various pagings) ; 33 cm

Find & Request >
- SCORE

**Half-hours with the best composers. Beethoven : arranged as solos and duets for the piano forte : with ad lib accompts for flute, violin & violoncello**

Beethoven, Ludwig van, 1770-1827 | Calcott, William H. (William Hutchins), 1807-1882 [185-?] | [Ed.] no. 2, duets. | London : Leader & Cock | 21 p. of music ; 36 cm

Find & Request >
- SCORE

**Beethoven's Lieder für das Pianoforte**

Beethoven, Ludwig van, 1770-1827 [1849] | Leipzig : Breitkopf & Härtel | 19 p. of music ; 33 cm

Find & Request >
- SCORE

**Beethoven's Lieder für das Pianoforte**

Beethoven, Ludwig van, 1770-1827

PAGE 1

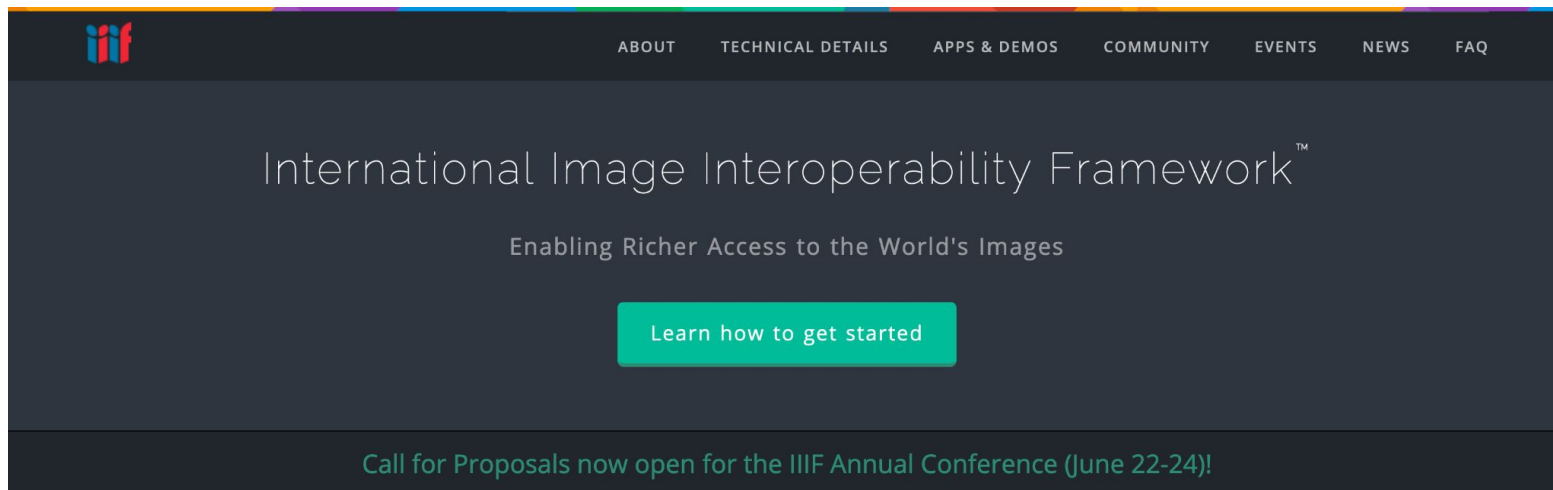
# **Beethoven in the House**

## *Digital Studies of Domestic Music Arrangements*

1. Motivations
2. Project Approach



## Contributing technologies - IIIF



<https://iiif.io>

**Interoperability:** IIIF offers a standardized way to access image and AV resources

# Contributing technologies - Edirom

## Measure Detector

Tensorflow

Python, Javascript

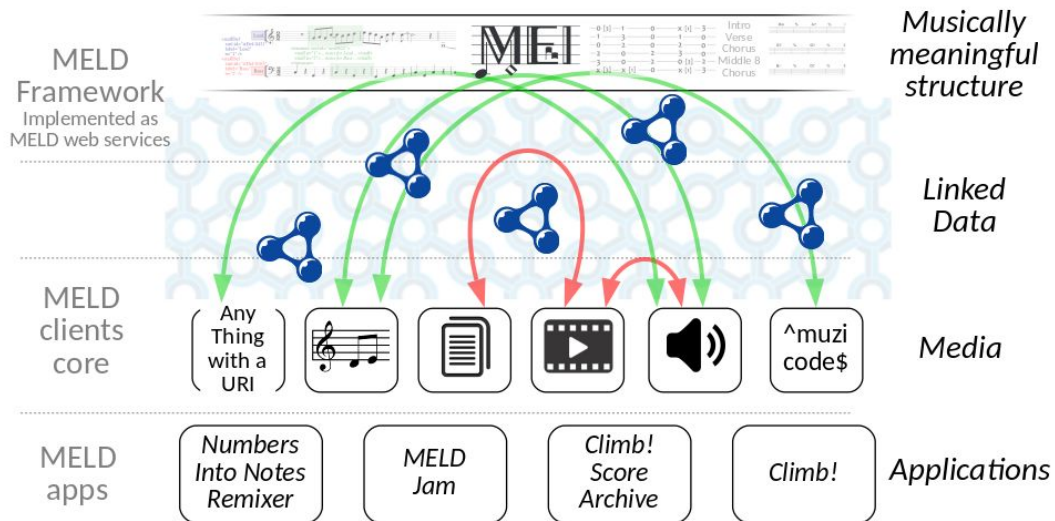
MEI

cemfi.Deep Optical Measure Detector

v1.0.2



# Contributing technologies - Music Encoding and Linked Data (MELD)



**Annotations:** a framework for combining annotations of multiple formats of music-related material

- MELD provides the framework for annotations which reference multiple sources.
- We will extend MELD with the ontological modelling necessary to represent complex musicological relationships *in the data*.

## Contributing technologies - MELD

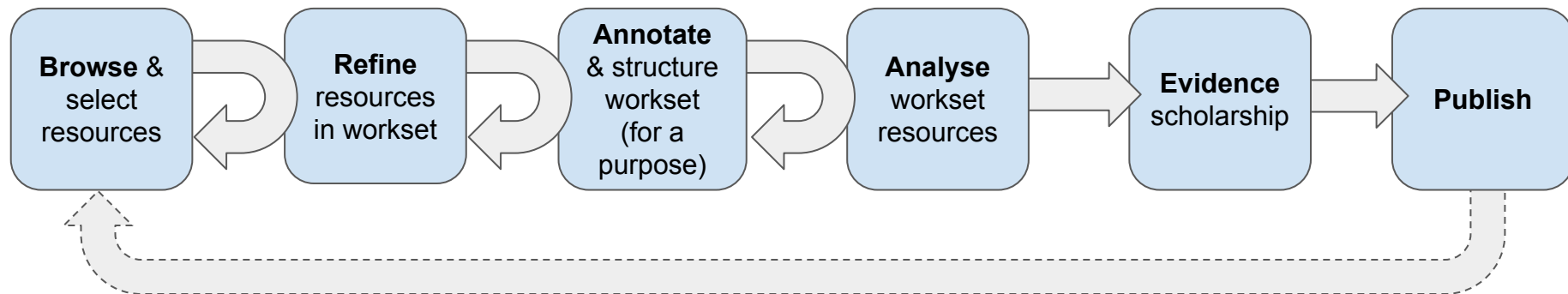


**Authoring** annotations: the Delius quartet app is a very simplistic annotation authoring tool

- Other, more sophisticated, MELD apps are presentational only (e.g. Lohengrin TimeMachine).
- We will create an authoring environment to gather annotations relating to domestic music arrangement, compatible with MELD.

## Goals - the prototype digital environment

Possible sequence of interactions...



...which, for example, might realised as...

Browse  
catalogue

Browse IIRF  
images of  
scores

Annotate  
measures for  
'gestures'

OMR and  
manual  
correction

Article on  
gestures  
supported by  
annotated data

Digital  
companion  
exploring  
gestures

## Goals - what will we have at the end of the project?

- The two musicology studies:
  - A study of Beethoven arrangements using digital music encodings
  - A study of musicological patterns in domestic arrangements
- A prototype digital environment for musicological exploration of digital material
- Innovative digital methodologies supporting musicological studies

# **Beethoven in the House**

## *Digital Studies of Domestic Music Arrangements*

<https://domestic-beethoven.eu/>

**Thank you - Questions?**

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