

CHORAL

RESEARCH PROJECT *(max. 5 pages)*

APPLICATION FORM TO REQUEST FOR FUNDING FOR JOINTLY SUPERVISED DOCTORAL THESIS

TITLE OF THE RESEARCH PROJECT

Documenting the Preservation of Digitized Archival Film: A Transdisciplinary Collaboration between Universities and Film Archives

SUPERVISORS

From recruiting University	First name	LAST NAME	University	Department
Supervisor	Sabrina	Negri	Università degli Studi di Torino	Dipartimento di Studi Umanistici (Humanities)
HDR or equiv.				
X <input type="checkbox"/>				
	First name	LAST NAME	University	Department
Co-Supervisor	Mihai	Ivanovici	Universitat Transilvania din Braşov	Electronics and Computers
HDR or equiv.				
X <input type="checkbox"/>				

5 main KEYWORDS

Intangible cultural heritage, Inventory, Digital tools, Promotion, Heritage processes

ABSTRACT (250 words max.)

Film studies have historically focused on films as moving images projected on a screen, mainly treating them as texts to be interpreted. However, the relatively new practice of film preservation has veered scholarly attention from films as moving images to films as material objects, thus broadening the discipline's boundaries from the humanities to the hard sciences. Film preservationists can no longer limit themselves to a literary-based hermeneutic approach; they also need to understand the material nature of film. The introduction of digital technology has further complicated the issue by adding computer science to the list of disciplines needed to restore and preserve audiovisual works.

Despite the need for a transdisciplinary approach, film preservation courses remain mostly limited to cinema and/or media studies departments, and film preservationists have either a humanistic or a scientific background. This Ph.D. project aims at bridging the gap between humanistic and scientific knowledge in film preservation by recruiting a candidate who would digitize titles from the film collection of the Museo Nazionale del Cinema in Torino, Italy, supervised by a Cinema Studies professor from the University of Torino, Italy. The second part of the project would involve designing and implementing algorithms for the digital color restoration of the video frames and for the correct preservation of the original content into its digital form, under the supervision of a professor of Electronics Engineering, Telecommunications and Information Technologies from Transilvania University of Brasov, Romania. The final step would be the documentation of the process in a publicly-accessible database.

Research aims and methodology

- Digitize film archival holdings from the Museo Nazionale del Cinema in Torino, Italy (Turin)
Perform historical research on the digitized titles (Turin)
- Design and implement (using Matlab or Python) image analysis and processing algorithms for digital color and/or image restoration (Brasov)
- Contribute to a publicly accessible database to document the steps taken in the restoration process (Turin/Brasov)

Relevance and added-value of the proposed research in relation to the current state of knowledge

- Create digital preservation and access copies of non-digitized archival films
- Contribute to the historical knowledge about those titles
- Contribute to the refinement of digitization and digital restoration techniques by analyzing the digitized audiovisual content in an image processing and analysis lab
- Contribute to the current discussion on the ethics of digital film restoration
- Contribute to the documentation of the restoration processes

Interdisciplinary nature of the research together with the alignment with the CHORAL programme and complementarity expertise of the teams

The research project brings together humanistic and scientific knowledge in a field, that of film preservation, where a transdisciplinary approach is absolutely necessary.

Prof. Sabrina Negri is an expert on the theory and ethics of film preservation, while prof. Mihai Ivanovici is expert on designing algorithms for image processing and analysis with application to digital film restoration.

Output plan including publication and dissemination activities

The digitized titles can be presented at specialized festival ("11 cinema ritrovato" in Bologna, Italy; "Le giornate del cinema muto" in Pordenone, Italy; "The San Francisco Silent Film Festival", San Francisco, CA, U.S.; etc.)

The candidate's research can then be published on a wide array of scholarly journals, such as the "FIAP Journal of Film Preservation", "The Moving Image", or the "Journal of Cultural Heritage".

The documentation related to the restoration process will be uploaded in a publicly-accessible database.

Estimated schedule

September 2024 — January 2026: Torino (University and Cinema Museum)

February 2026 — September 2027: Brasov (R&D Institute of Transilvania University)

September 2024 — February 2025: Torino (University and Cinema Museum) — perform digitization and construct a 1st data set of images/video frames



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CHORAL, CULTURAL HERITAGE OUTREACH IN ROMANCE LANGUAGES

March 2025 — August 2025: Brasov (R&D Institute of Transilvania University) — start basic analysing and processing

September 2025 — February 2026: Torino (University and Cinema Museum) — advanced digitization and 2nd data set

March 2026 — August 2026: Brasov (R&D Institute of Transilvania University) — advanced analysis and processing

September 2026 — September 2027: Torino (University and Cinema Museum) — PhD thesis writing



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