

Fondazione Cineteca di Bologna  
Fédération Internationale des Archives du Film  
Association des Cinémathèques Européennes  
L'Immagine Ritrovata – Film Restoration and Conservation

## FILM RESTORATION / FIAF SUMMER SCHOOL 2016 PROGRAM

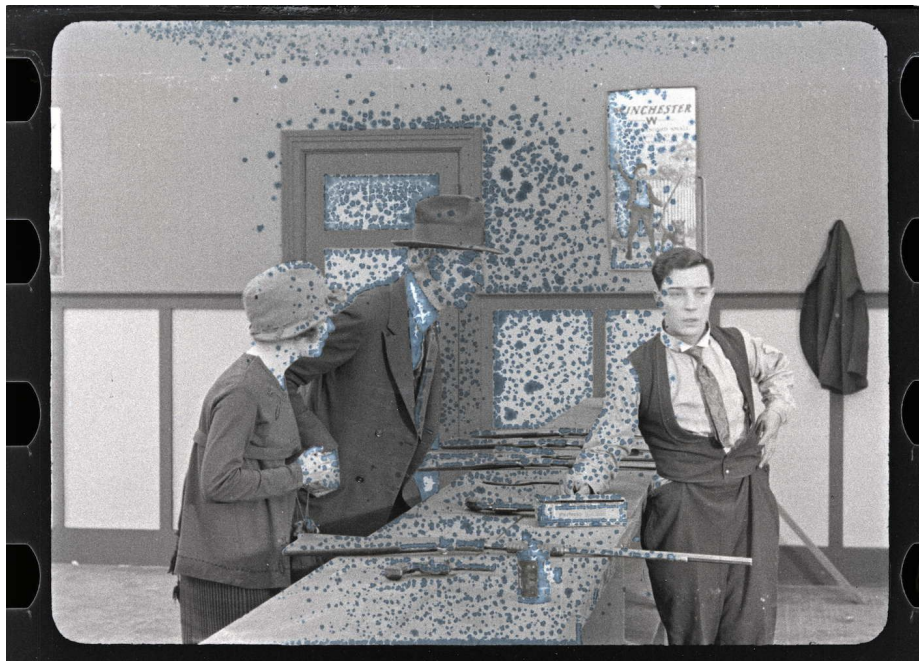
**Welcome meeting:** June 24<sup>th</sup>

**Film restoration online theory course:** distance learning, May 11<sup>th</sup> to June 15<sup>th</sup> (on Wednesdays)

**FIAF congress – symposium in partnership with The Reel Thing: “A new life for the cinema of the past”:** Bologna, Cineteca facilities and Palazzo Re Enzo, June 25<sup>th</sup> to 26<sup>th</sup>

**Theory lectures and Il Cinema Ritrovato film festival:** Bologna, Cineteca facilities, June 25<sup>th</sup> to July 2<sup>nd</sup>

**Restoration practice classes:** Bologna, L'Immagine Ritrovata, July 4<sup>th</sup> to 15<sup>th</sup>



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## 1. INTRODUCTION

### WORK IN PROGRESS

#### Past and future editions

In 2016 the Film Restoration / FIAF Summer School is being held in Bologna for the seventh time. Once again the Fédération Internationale des Archives du Film (FIAF) and the Association des Cinémathèques Européennes (ACE) have combined their efforts with Cineteca di Bologna and L'Immagine Ritrovata film restoration and conservation laboratory to organize the Film Restoration / FIAF Summer School 2016, held each year between 2007 and 2010, and every second year since 2012.

In 2013 for the first time the Summer School project moved from Bologna to Asia at the National Museum of Singapore to offer an alternative to film restoration training in another area of the world.

In February 2015, the Film Heritage Foundation, in collaboration with The Film Foundation's World Cinema Project, Cineteca di Bologna and L'Immagine Ritrovata, hosted a one-week Film Restoration School in India to provide film preservation and restoration training to help safeguard Indian cinematic heritage. Following the success of this project, in February 2016 the Film Preservation and Restoration School India will be held for the second time in Pune.

In Bologna a total of 214 participants have taken part in previous years, representing 58 countries (Algeria, Australia, Austria, Belgium, Brazil, Canada, China, Chile, Colombia, Croatia, Cuba, Czech Republic, Egypt, Estonia, Finland, France, Georgia, Germany, Greece, Holland, Iceland, India, Indonesia, Iran, Iraq, Ireland, Israel, Italy, Japan, Jordan, Kenya, Korea, Lebanon, Lithuania, Luxembourg, Macedonia, Mexico, Montenegro, Morocco, New Zealand, Nigeria, Norway, Philippines, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, South Africa, Spain, Sweden, Taiwan, Thailand, Tunisia, Turkey, United Kingdom, USA).

#### Bologna 2016

After the success of previous editions, FIAF, ACE, Cineteca di Bologna and L'Immagine Ritrovata are looking forward to running a new training course in the field of film restoration in Bologna. Like previous Summer Schools, the 2016 course is aimed at specialists and film archive staff. During the participant selection process, priority will be given to those working in FIAF and ACE member institutions.

#### WHY DOES FIAF SUMMER SCHOOL FOCUS ON RESTORATION?

While there are many private and state film archives, specialized laboratories are quite few in number. Every year a considerable number of titles are restored by numerous film archives. Therefore, it appears necessary for today's curators and their staff to be trained in the use of the newest digital equipment for the preservation and restoration of film heritage, and to learn about digital strategies for accessing materials. Furthermore, all students who are interested in working in a film archive and/or a film restoration laboratory in the near future should develop highly specialized digital and photochemical skills, which are the key know-how to enter this field.

## FIAF CONGRESS 2016

Bologna hosted the congress in 1994. Twenty-two years later, it is our pleasure to share our achievements and future challenges with the FIAF community: new archive spaces and our restoration lab L'Immagine Ritrovata. As for restoration and conservation, the success of our Chaplin Project inspired us to launch a new research project in 2015 on the work of Buster Keaton.

Just like in 1994, the congress will partly overlap with Il Cinema Ritrovato, the festival of film archives. Not only is Il Cinema Ritrovato organized by a film archive but its very program depends on the involvement of film archives from around the world. The weeklong festival focuses on the key issues of our sector today.

## IL CINEMA RITROVATO FILM FESTIVAL

Film restoration gives us the fantastic opportunity of bringing great films back to the big screen and to the audience, as presenting and exhibiting restored films is a key part of the restoration process. For this reason the Film Restoration / FIAF Summer School project takes place mainly in Bologna, side by side with Il Cinema Ritrovato film festival, a true meeting place for film researchers and experts (<http://festival.ilcinemaritrovato.it/en/>). In 2015 Il Cinema Ritrovato film festival involved over 70 film archives, institutions, major film studios and productions companies from all over the world, and the audience topped 85,000 people. The connection between learning about digital and photochemical restoration and an event such as Il Cinema Ritrovato film festival is very close: while it is crucial to put restoration into practice and to learn how to restore a film, it is equally as important to understand how films, restored by different archives institutions, major film studios and productions companies, can be exhibited today.

## TARGETS AND FINAL AIM

The project's main objective is to teach and update participants on how to restore and preserve a film through the use of photochemical and new digital technologies. Participants will have the chance to experience everyday work in a highly specialized laboratory; they will follow every step of the process through all departments, from beginning to end. Film Restoration / FIAF Summer School 2016 participants are expected to develop and practice a specific set of skills: operating all digital and photochemical equipment in an archive and/or laboratory; following a complete restoration workflow; performing all the primary necessary operations needed to restore a film; evaluating the state of conservation of a film and choosing the best practice to restore, reconstruct and preserve it.

After completing the Film Restoration Summer School participants will:

- know how a film can be restored using new digital and analogue technologies in a modern, flexible work environment;
- be able to manage a complete restoration workflow;
- know how to choose the best format to restore a film and have it digitized from film support to 35mm, DCP, HD and SD broadcasting until DVD support;
- be able to discuss each step of a restoration project in detail with a restoration laboratory;

- know the various approaches to restoration of different FIAF archives;
- know how to manage a film restoration project budget.

Finally, past editions of the Film Restoration / FIAF Summer School have proved to be an excellent meeting ground for people working in the same field. It represents a great opportunity for participants to initiate collaborations on possible future restoration projects.

## 2. Program

### PHOTOCHEMICAL AND DIGITAL RESTORATION

The innovative Film Restoration / FIAF Summer School 2016 is dedicated to teaching digital and photochemical techniques for the restoration of film heritage. While digital technologies have a well-established role in the contemporary film industry, their importance in the restoration of films has been somewhat neglected as a teaching/learning experience.

At L'Immagine Ritrovata laboratory participants will follow the entire restoration process: photochemical, digital (4K, 2K and HD) and sound restoration, from repairing to printing preservation material, from film scanning to film recording, from sound digitization to final sound restoration.

### TRAINING PROGRAM

L'Immagine Ritrovata laboratory's highly specialized staff will be closely involved in the intensive 2-week training program and internship. Participants will be divided into groups and will work in each of the laboratory's departments:

- Film identification
- Film repair, chemical treatment and washing
- Film comparison
- Film scanning
- Digital restoration
- Color correction
- Sound scanning and sound restoration
- Mastering and Digital Cinema
- Data and Network management and back-up strategies
- Film recording
- Photochemical preservation and restoration
- Analogue grading
- Print and processing

## A 4-STEP COURSE

This edition of the Film Restoration / FIAF Summer School 2016 is structured along four main course steps:

1. **Film restoration online theory course:** distance learning, May 11<sup>th</sup> to June 15<sup>th</sup> (on Wednesdays)
2. **FIAF congress – symposium in partnership with The Reel Thing: “A new life for the cinema of the past”:** Bologna, Cineteca facilities and Palazzo Re Enzo, June 25<sup>th</sup> to June 26<sup>th</sup>
3. **Theory lectures and Il Cinema Ritrovato film festival:** Bologna, Cineteca facilities, June 25<sup>th</sup> to July 2<sup>nd</sup>
4. **Restoration practice classes:** Bologna, L'Immagine Ritrovata, July 4<sup>th</sup> to July 15<sup>th</sup>

### 1. Film restoration online theory course: distance learning

For one month before the beginning of classes in Bologna, participants will be provided with theory lessons, downloadable from the Internet on a weekly basis (each Wednesday). This distance learning will include lessons on new digital film restoration techniques, access to materials, and conservation. These online lessons will run from May 11<sup>th</sup> until June 15<sup>th</sup>, 2016.

### 2. FIAF congress-symposium in partnership with The Reel Thing: A new life for the cinema of the past

The FIAF Congress in Bologna is a compelling opportunity to investigate the resurgence of classic cinema. Restoration is the theme of the annual Symposium. The first day of the Symposium will focus on restoration at large (what is being restored today, new technologies, documentation and more) in partnership with The Reel Thing. The second day is divided in two sessions. The morning session will look at film versus digital from different perspectives: from fear of the disappearance of a physical medium, an issue raised by a recent survey demonstrating that archives are using film more than ever, to concern for the loss of film culture. The afternoon session will investigate a new phenomenon: theatres run by film archives are not the only ones screening old films.

### 3. Theory lectures and Il Cinema Ritrovato film festival: meetings with experts

The first week will be entirely devoted to the XXX edition of Il Cinema Ritrovato film festival, Cineteca di Bologna's main international event. Since 1986, the festival has been investigating the most obscure territories of cinema history, screening the best in “Recovered and Restored Films” from archives around the world. Some screenings will be part of program. Daily meetings of one hour or more with international specialists will be organized for all participants.

During the festival week meetings will tackle more general issues, such as film house and archive management, the conservation and preservation of film heritage, cataloguing and other non-film issues. Meetings will also focus on film restoration theory, in particular dealing with working in a film restoration laboratory and analysing specific pieces of restored works. These meetings will introduce the 2-week long internship; daily topics will reflect laboratory stages.

#### **4. Restoration practice classes:**

During the internship participants will be supervised by international experts and laboratory staff as they put into practice what they have learned during their first week of theory.

A considerable amount of time will be devoted to restoration practices. For 2 weeks, participants will be offered hands-on experience, working in each of the laboratory's departments.

During the internship participants are expected to be in the premises of the L'Immagine Ritrovata laboratory 8 hours a day, for 10 days. Participants will have access to all of the laboratory's departments.

Each department will accommodate a maximum of 5 participants. This is considered the right ratio of students per piece of equipment to allow each student the possibility of interacting directly.

## INTERNSHIP SUBJECTS

<b>Film Identification</b>	This very first step involves the identification, study and analysis of film materials, different elements (negative, positive, intermediate), trademarks, edge codes and marks, shape and size perforation, etc.
<b>Film Repair, Chemical Treatment and Washing</b>	Film handling and inspection: how to fix tears and breaks using adhesive film tape; analysis of old splices; restoring splices by hand with cement; repairing film to prepare it for cleaning and scanning or printing; cleaning of film nitrate, triacetate and polyester manually and with an ultrasonic cleaning machine.
<b>Film Comparison</b>	Film comparison and analysis to chose the best prints for restoration.
<b>Film Scanning</b>	Scanning of a motion picture image from 35mm and 16mm negative, positive and intermediate materials to a digital file (4K and 2K).
<b>Digital Restoration</b>	Digital treatment of images using dedicated software to eliminate physical damage to the film resulting from usage and the manual handling of film, as well as the restoration of visual clarity of images by working on problems like grain, instability and flicker without affecting the original material. Digital restoration has a wide range of tools and possibilities; therefore it is vital for archivists to know what can be done in order to establish their specific restoration workflow.
<b>Color Correction</b>	Film color correction and color fade restoration. From Tint and Tone to Technicolor. 4K, 2K, HD, SD conforming, Mastering, Color references.
<b>Sound Scanning and Restoration</b>	Sound technology history: 150 years of sound on film. Sound transfers: opticals, magnetics and soundtrack scanning. The sound restoration workflow: from analog to digital (to analog).
<b>Mastering and Digital Cinema</b>	Quality Control, finalization and export of output formats: Digital Cinema Packages, HDCAM tapes, video files.
<b>Data and Network Management and Back-up Strategies</b>	How a machine room works and how all the machines are connected to workstations, and interconnected with each other. Data processing and data transfer, to make a copy of a film on digital support.
<b>Film Recording</b>	How to set a film recorder to generate master negatives.

**Analog Grading**

Use of the Color master to set printing values to print from negative to interpositive for preservation, or a positive for screening.

Study of the Desmet Method and practical application to recreate tinting and toning.

**Print and Processing**

Principles of optical and contact printing and their differences; study of different printers, printer loading and usage. Basics of film processing and the analysis of the relationship between and parameters shared by printing and film processing.

Application of Lad, Strip, and other quality-control tools to check the correct operation of printing and development. Quality control.

### 3. WHERE AND WHEN

- June 24<sup>th</sup>, Bologna, Cineteca facilities: Welcome Meeting
- June 25<sup>th</sup> and 26<sup>th</sup>: Bologna, Palazzo Re Enzo: FIAF congress – Symposium focus on Film Restoration in partnership with The Reel Thing: “A new life for the cinema of the past”
- June 25<sup>th</sup> to July 2<sup>nd</sup>, Bologna, Cineteca facilities: Theory lectures and Il Cinema Ritrovato film festival
- July 4<sup>th</sup> to 15<sup>th</sup>, Bologna, L'Immagine Ritrovata: Restoration practice classes

### 4. PARTICIPANTS

The training is conceived for an international target group, and will be taught by an international panel of the best experts from different countries. The Film Restoration / FIAF Summer School 2016 is aimed at staff working at film archives, institution or organization, as well as students in that field. The aim is to foster a shared knowledge in the field for current and future generations and world film archives.

All classes will be in English.

Participants will be selected according to C.V., commitment and motivation.

The course will be divided into different levels and participants will be grouped according to their skills and expertise according personal C.V. and past experience in that field.

A special commission composed of representatives from FIAF, ACE, and Cineteca di Bologna will examine all applications. The commission will officially release the names of the 40 selected participants via e-mail and the Cineteca di Bologna and L'Immagine Ritrovata website at the beginning of April 2016.



## 5. FEES

Participation fee: 3.000 Euros.

The participation fee includes: registration, festival pass, FIAF congress accreditation (Symposium: "A new life for the cinema of the past"), and accommodation for 23 days and lunch for 19 days.

Lunch will be provided every day from June 25<sup>th</sup> to July 2<sup>nd</sup>.

From July 4<sup>th</sup> to July 15<sup>th</sup> lunch will be provided Mondays to Fridays only.

Accommodation is provided from June 23<sup>rd</sup> (check-in) to July 16<sup>th</sup> (check-out).

If applications exceed the maximum number of participants allowed, a selection will be made. Selected participants must confirm their attendance by paying their fee in advance and not later than April 29<sup>th</sup>. The list of selected participants will be announced on April 8<sup>th</sup>.

Selected participants who do not pay their fee by the due date will be excluded and replaced by the next eligible candidate in the waiting list.

### Notes about Scholarships

Selection will be based on the strength of their application and their relevance to the FIAF and ACE archives with which they are associated, and to the FIAF/ ACE community in general:

- **FIAF grants 4 scholarships of 1.000 € each**

- **ACE grants 4 scholarships of 750 € each**

We are currently processing other scholarships and we have not received yet all necessary confirmations. Candidates will be notified of all news in due time.

## 6. DEADLINES

2014 DATES	WHERE	ABOUT MATERIALS
March 25 <sup>th</sup>		Deadline for application form submission
March 29 <sup>th</sup> - April 8 <sup>th</sup>		A special commission composed of FIAF, ACE and Cineteca di Bologna members will examine all application forms, select 30 participants and release their names.
April 11 <sup>th</sup>		Announcement of participants' names. All candidates will receive a communication via e-mail concerning the selection results. The list of selected participants will be published on Cineteca di Bologna and L'Immagine Ritrovata websites.
April 29 <sup>th</sup>		Deadline for payment of registration fee
May 11 <sup>th</sup> - June 15 <sup>th</sup>	Online	Film Restoration / FIAF Summer School 2016 distance learning
June 15 <sup>th</sup>		Definitive program of the theory lessons, names of international tutors
June 25 <sup>th</sup> - June 26 <sup>th</sup>	Bologna	FIAF Congress – symposium in partnership with The Reel Thing: “A new life for the cinema of the past”
June 25 <sup>th</sup> - July 2 <sup>nd</sup>	Bologna	Il Cinema Ritrovato film festival, Film restoration theory course
July 4 <sup>th</sup> - July 15 <sup>th</sup>	Bologna, L'Immagine Ritrovata film lab	Film restoration practice

## Film Restoration / FIAF Summer School 2016 partners

### **Cineteca di Bologna**

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ACE Secretariat: Kerstin Herlt

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### **L'Immagine Ritrovata – Film Restoration and Conservation**

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