

From «Raw» to [...] to Matroska/FFV1

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Sharing

FIAF Congress, Prague, Czech Republic
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Scanner

- film transport
- light source
- camera
- image section
- wet scanning
- file format

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File Format

- resolution
- bit depth
- linear, power, logarithmic
- colour model
- chroma subsampling
- illuminant

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Past Experimentations

from:

- AVI / HuffYUV
- AVI / FFV1 version 1

to:

- Matroska / FFV1 [version 3]

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Present Experimentations

from:

- MXF / OpenEXR
- flavour of NUT / multiple (e.g. 15) 16 bit
- flavour of NUT / RGB72 or Y'C₁C₂ 24-bit
- flavour of NUT / expanded OpenEXR

to:

- Matroska / FFV1 version 4 using RGB72, Y'C₁C₂ 24-bit, floats & additional metadata

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ACES for Audio-Visual Restorers

An Introduction with an Ounce of OpenEXR and OpenColorIO

Abstract

An ACES presentation from the restorer's perspective, with many examples taken from our daily work, followed by an informal Q&A session.

This is an advanced course: the attendee should be familiar with high-school maths; we'll delve into power functions and logarithms from there.

Content includes:

- Cinematic colours – we'll also discuss the additive Dufaycolor and the subtractive Gasparcolor;
- improving the restoration workflow with ACES (Academy Color Encoding Specification);
- implementing and using OpenEXR and OpenColorIO (OCIO) for the colour management;
- establishing, documenting and preserving the creative intent of audio-visual legacy.

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Beyond Black and White: Additive Colour Systems

We have organised an intensive Late Summer School on technical issues about historic colour techniques and the digital methods we have today to reproduce these. It will take place during one week, from 15 to 19 September 2014. It will be hosted by our company AV Preservation by reto.ch in Écublens (a suburb of Lausanne, Switzerland) and the course will be held mainly on our premises and at the nearby Swiss Federal Institute of Technology.

The aim of the Late Summer School is to provide an intensive one-week training course for film restorers from all over the world who have some experience. Instruction will be provided by various specialists in a pleasant learning environment. The Late Summer School will supplement professional instruction with social events and local sight-seeing excursions. We have worked out a detailed course programme that includes unbelievable lectures, unforgettable hands-on sessions, and spectacular demonstrations of both extinct analogue and nascent digital technologies. A full programme summary will be sent to all applicants upon acceptance into the Late Summer School.

There are 12 student positions available. The fee for the one-week course is CHF 2 500 and covers accommodation (six nights from 14 to 20 September 2014).

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Beyond Black and White: Additive Colour Systems

• Opening night Reception

Tuesday 16

- Hands-on #3: Manufacturing of Cinécolor
- Hands-on #4: Manufacturing of Kodacolor Lenticular
- Hands-on #5: Manufacturing of Dufaycolor
- Shooting onto the Manufactured Films
- Processing of the Exposed Films

Wednesday 17

- ACES for Restorers
- Programming Look-up Tables
- OpenEXR for Conservators and Restorers
- Visit of a Postproduction Company

Thursday 18

- Digitising of Historic Films and New Produced Films
- DCP Encoding of Legacy Films
- Screening Night on Additive Colour Systems

Friday 19

- Ethical Issues on Digital Conservation and Restoration
- Open Forum
- Boat Trip on the Lake of Geneva and Closing Night Reception

2016–09–01

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Data Migrations

2014

- our internal archive from LTO-4 to LTO-6 (5.7 PB)

2014–[2019?]

- [...]

[2019?]

- our internal archive from LTO-6 to LTO-8

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read | script | write

script to modify

- container
- codec
- both container and codecs
- other element

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Kate Murray:

«More adoption
means better sustainability.»

[while proudly speaking about MXF/JPEG 2000
at the Matroska/FFV1 symposium in Vienna]

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