# How to process transparencies

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JACoW Team Meeting, November 2023, HsinChu, Taiwan

### Processing slides

... means producing PDF files of transparencies

The aim of the slides processing editor is to produce JACoW compliant PDF files of the presentations for inclusion in the proceedings.

You do not have to edit the type setting or layout, but you still have to make sure of the following:

- all fonts must be embedded
- all missing characters should be fixed
- slides should be free of overlapping issues
- multimedia content (videos, animated gifs) should be embedded

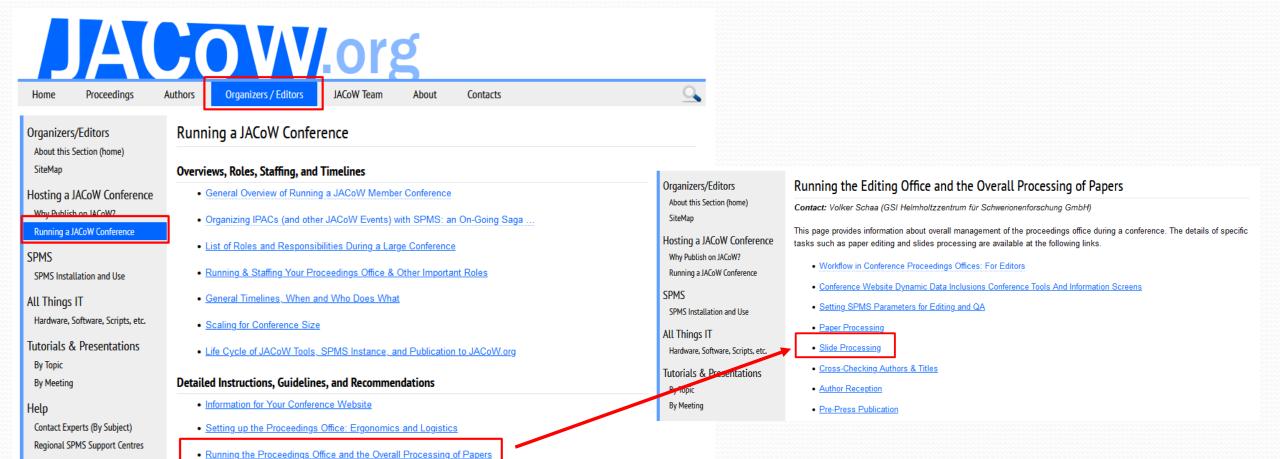
### Contents of this talk

- Documentation (JACoW wiki) and Prerequisites
- SPMS environment (download/upload)
- Processing PDF slides (check and fix missing fonts)
- Processing PowerPoint slides (how to fix overlaps)
- how to convert slides to PDF
- extracting media files from a PowerPoint presentation
- embedding videos and animations in PDF files
- trouble-shooting and answering questions

# Processing slides: Documentation

### Processing slides: Documentation

Guidelines, tutorials and instructions are available on the JACoW-Wiki pages:



https://www.jacow.org/JTM2016/ProcessingTransparenciesEmbeddingAnimations

JACoW Team Slack Channel

. Registration through SPMS

#### Processing slides: Prerequisites

How to prepare your workstation in the proceedings office



The conference organizer is responsible for the PC set-up, but for processing slides some extra work is required.

### Processing slides: Prerequisites

#### What to do before you start

- ▶ install video transcoders and other useful software products (Handbrake, Virtual Dub, Convertio)
- **▶** install Lightshot (tool for making screenshots)
- **▶** install PPspliT (PowerPoint Add-in)
- **▶** modify PowerPoint print options: print slides in High Quality
- ▶ install Macintosh Fonts on a Windows PC
- ▶ install the latest JACoW.joboptions file (needed for Acrobat distiller and Adobe PDF printer), JACoW-12.joboptions, November'23
- ▶ Prerequisites are available in detail on the JACoW-wiki pages:

https://www.jacow.org/JTM2016/ProcessingTransparenciesEmbeddingAnimations

Processing Transparencies & Embedding Animations

Processing Transparencies - What to do before you start, updated by Michaela Marx (November 2023), Prerequisites - What to do before you start @

# Processing slides: The presentations management in the JACoW-SPMS

### Processing slides: SPMS privileges

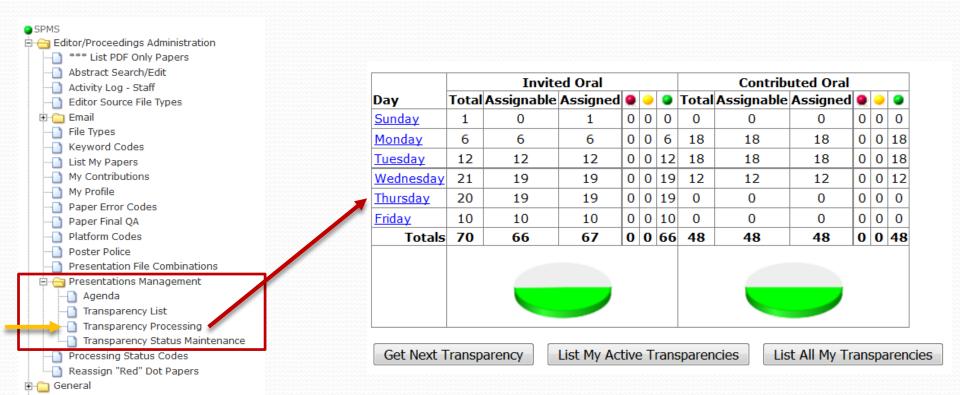
#### In the SPMS (Scientific Program Management System)

- the conference administrator needs to setup the access privileges for slide editors
- after login to the SPMS, check the boxes named 'Transparency Editor' and 'Transparency Processing'



### Processing slides: the SPMS environment

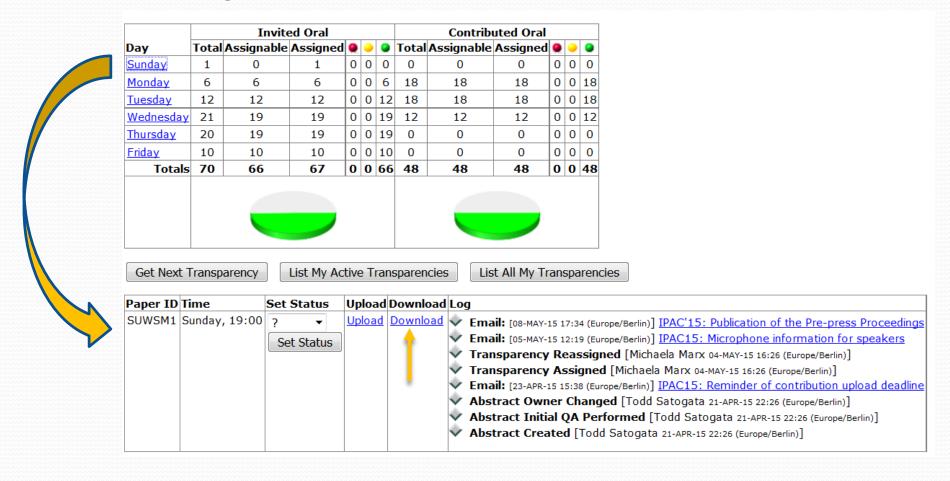
Editor/Proc. Admin Presentations Management Transparency Processing



Note: slides should only be processed after the talk has been given to make sure that it is the final version without last minute changes.

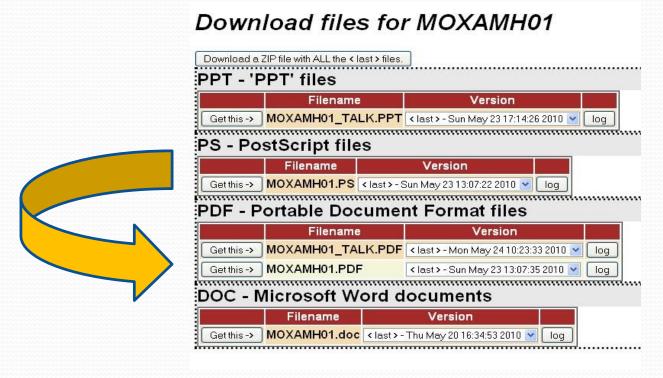
### Processing Slides: the SPMS environment

select a day to download the slides



### Processing Slides: download screen

The download screen shows all files which have already been uploaded to the database by the author or by an editor.

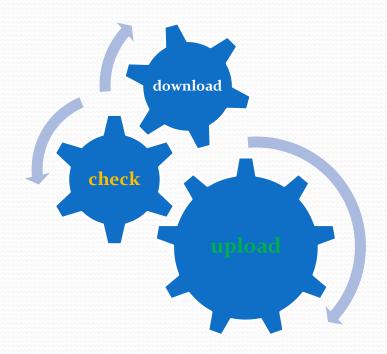


► talks are named \*\_TALK.PPT, \*\_TALK.PPTX, \*\_TALK.PDF, \*\_TALK.ODP

**ODP** = open document presentation (Open Office)

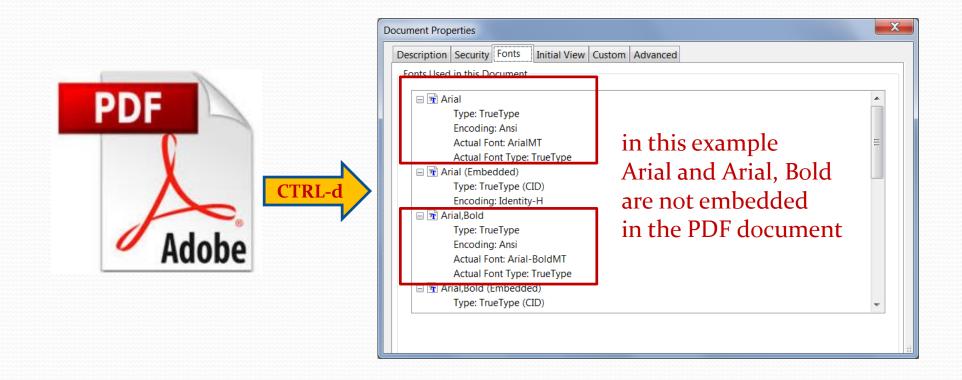
### Processing Slides: Slides in PDF format





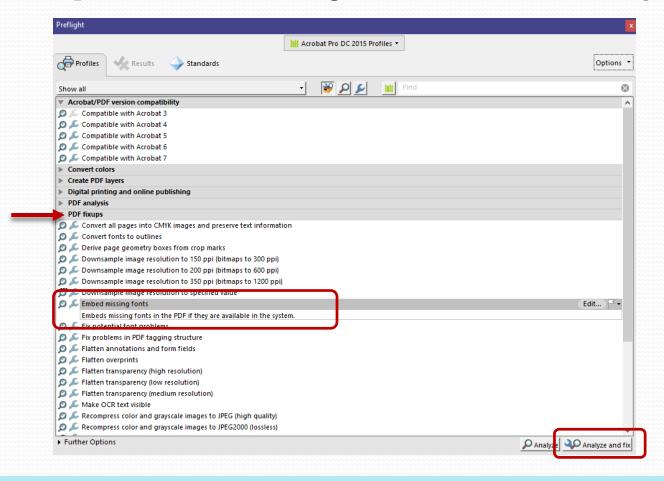
### **Processing PDF Slides**

- ▶ If the author uploaded a PDF slides file ... great ☺
- download the PDF slides file, do a visual inspection and check for missing fonts in Acrobat Pro with CTRL-d



#### Processing PDF slides: how to embed missing fonts

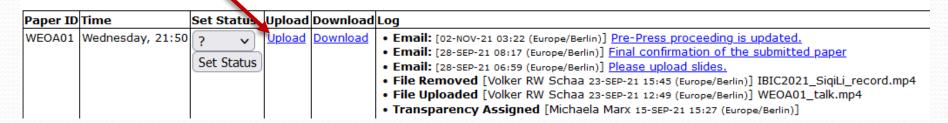
- in Acrobat Pro (example is version 2017) do SHFT-CTRL-x
- look under PDF fixups for 'Embed missing fonts' and click the 'Analyze and fix' button

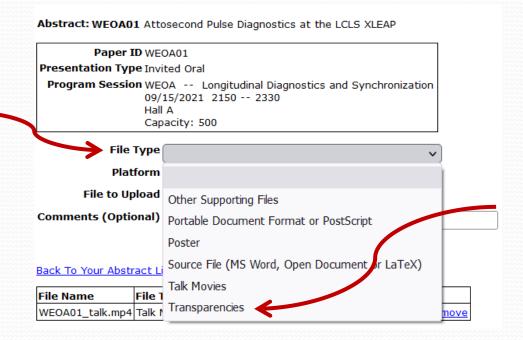


save the PDF file, upload it to the database, leave a comment – and you are done ©

#### Processing slides: how to upload a slides file in the SPMS

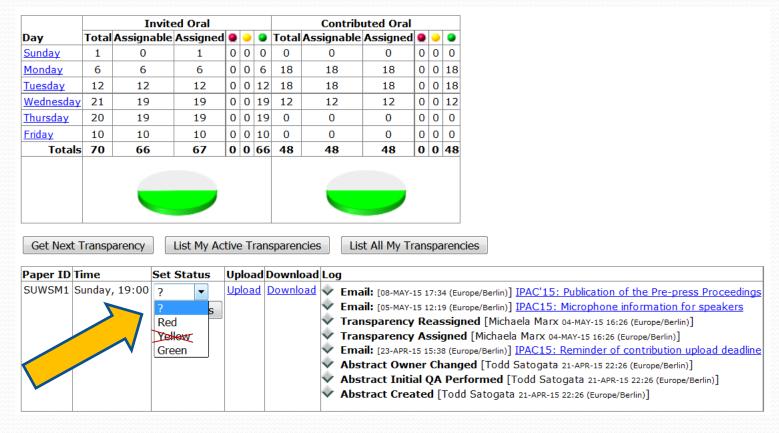
click the Upload button and select file type 'Transparencies'





#### Processing slides: status and comments

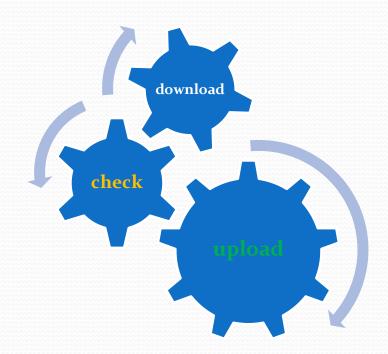
▶ after the upload, set the processing status (red or green), and leave a comment



- ► GREEN: Perfect! Leave a nice comment and you are done ©
- ▶ RED: There is a problem and further action is required!
  Describe the problem in the comment field –
  an email with your comment will be send by the SPMS to the speaker

# Processing Slides: PowerPoint slides





#### Now the challenge: processing PowerPoint slides

If the author uploaded PPT (PowerPoint) slides only ...

- download the PPT slides file, start the slide show (press F5) for a visual inspection and check for:
  - overlapping images or text
  - bad or missing characters
  - animations and embedded videos
  - the slides format (4:3, widescreen or whatever)
- in case everything looks fine, convert the PPT slides to PDF and upload them to the database
- in case you detect overlaps or animations some extra work is needed before the slides can be converted to PDF

### Processing slides: Fixing overlaps with PPspliT



#### Fixing overlaps using PPspliT

- the PowerPoint Add-in named PPspliT is used to separate overlapping content
- the installation of the Add-in is described in the Prerequisites on the JACoW Wiki pages: https://www.jacow.org/JTM2016/ProcessingTransparenciesEmbeddingAnimations

Processing Transparencies & Embedding Animations Processing Transparencies - What to do before you start, updated by Michaela Marx (November 2023), Prerequisites - What to do before you start &

after the add-in has been installed PowerPoint offers a new tab named PPspliT. To run the add-in select the slides where you want to split the overlapping content and hit the Split animations button on the left.



21

# Processing slides: How to convert PowerPoint slides to PDF?

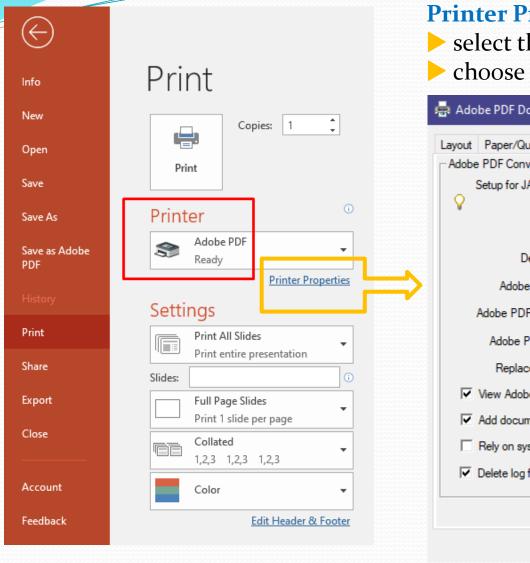


#### Processing slides: how to convert PPT to PDF

There are different ways to convert PPT slides to PDF – but there is **only one way recommended**:

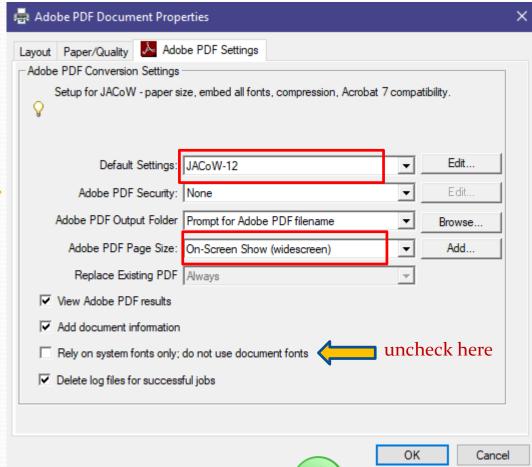
- print the slides to the Adobe PDF printer
- only this way makes sure to embed all fonts
- **Exception**: Use **Save As type PDF** when printing to Adobe PDF failed, e.g. when images look strange or colors have changed

### Print the slides to the Adobe PDF printer for conversion to PDF



#### **Printer Properties**

- select the JACoW-12 options
- choose the correct Adobe PDF Page Size based on the slides format

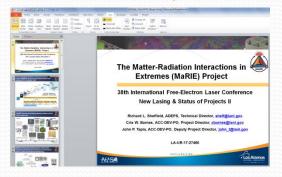


- the JACoW-12 options make sure that all fonts will be embedded
- For the widescreen format select On-Screen Show (widescreen) from the list of available page sizes

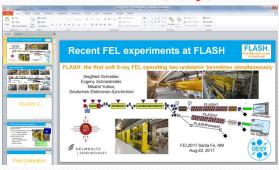
### Processing slides: How to adjust the slides format

### Processing slides: different formats

#### Standard (4:3)



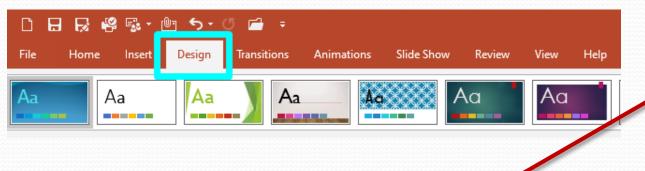
#### Widescreen (16:9)



#### **Custom Slide Size**



▶ to check the format → select Design → Slide Size



► the slide size is highlighted in grey, if not, click on **Custom Slide Size** to get the size



### Processing slides: how to deal with different formats

look at the JACoW-Wiki pages for further instructions:

https://www.jacow.org/JTM2016/ProcessingTransparenciesEmbeddingAnimations



#### Organizers/Editors

About this Section (home)

SiteMap

Hosting a JACoW Conference

Why Publish on JACoW?

Running a JACoW Conference

#### **SPMS**

SPMS Installation and Use

#### All Things IT

Hardware, Software, Scripts, etc.

#### **Tutorials & Presentations**

By Topic

By Meeting

#### Help

Contact Experts (By Subject)
Regional SPMS Support Centres
JACOW Team Slack Channel

#### Preparing for Tutorial

- · Powerpoint installed
- Acrobat Pro installed <u>Attach:config.docx</u>
- · Handbrake (video transcoder to convert avi and wmv files to MPEG-4) https://handbrake.fr/downloads.php
- · Virtual Dub (free video capture/video processing utility) https://sourceforge.net/projects/virtualdub/
- · Cam Studio https://camstudio.org/
- PPsplitT http://www.maxonthenet.altervista.org/ppsplit.php zip file password is: "ppsplit" Github
- Adobe Flash Player NO LONGER SUPPOORTED!!

#### Other useful tools

- VLC Player (free cross-platform multimedia player) https://sourceforge.net/projects/vlc/
- · Lightshot (to take customizable screenshots) https://app.prntscr.com/en/index.html

#### Processing Transparencies & Embedding Animations

Processing Transparencies - What to do before you start, updated by Michaela Marx (November 2023), Prerequisites - What to do before

How to deal with different slide formats, Instructions (updated by Michaela Marx in November 2023)

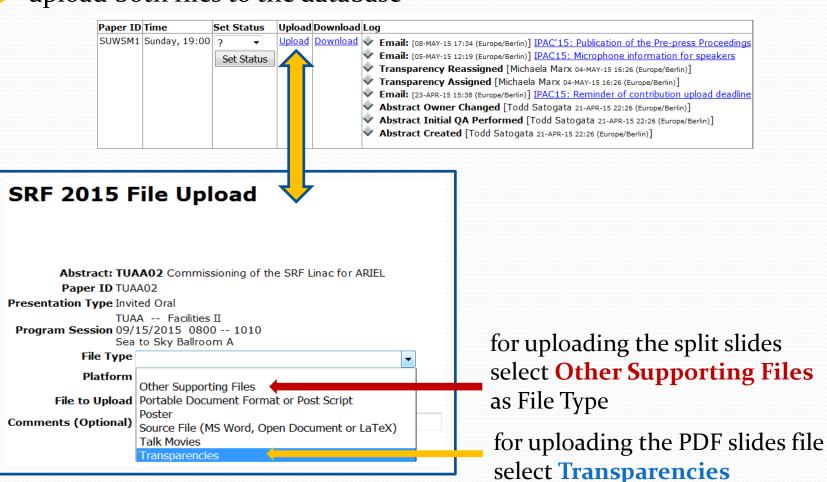


Show a

# Processing slides: File upload in the SPMS

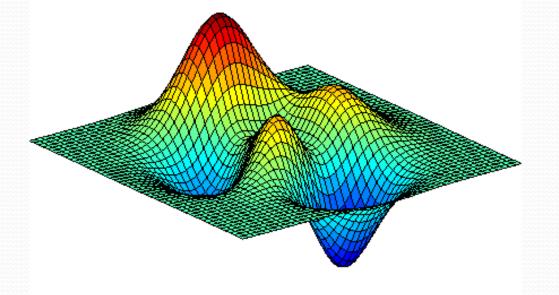
#### SPMS File upload: upload both, pdf and split slides

- save the new PPT file with split objects as Filename\_TALK\_split.pptx
- convert the PPT slides to PDF and save as Filename\_TALK.pdf
- upload both files to the database



### Processing slides: Embedding videos and animated gifs in PDF files





### Embedding videos and animations in PDF files

If the PowerPoint presentation contains videos or animated gifs ...

- extract the media files
- transform video files (\*.avi) to MPEG-4 (\*.mp4) which is the supported Acrobat video format
- transform animated gifs to MPEG-4 directly with Convertio
- convert the PPT slides to PDF by printing to Adobe PDF



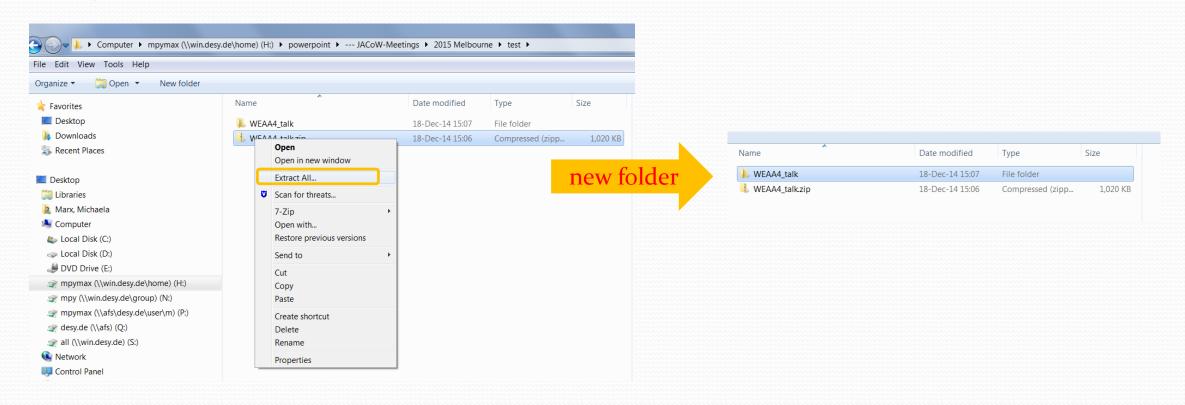
▶ after all these steps, open the PDF slides file and embed the videos and animations

Processing slides:
How to extract media files like videos and animated gifs from PowerPoint



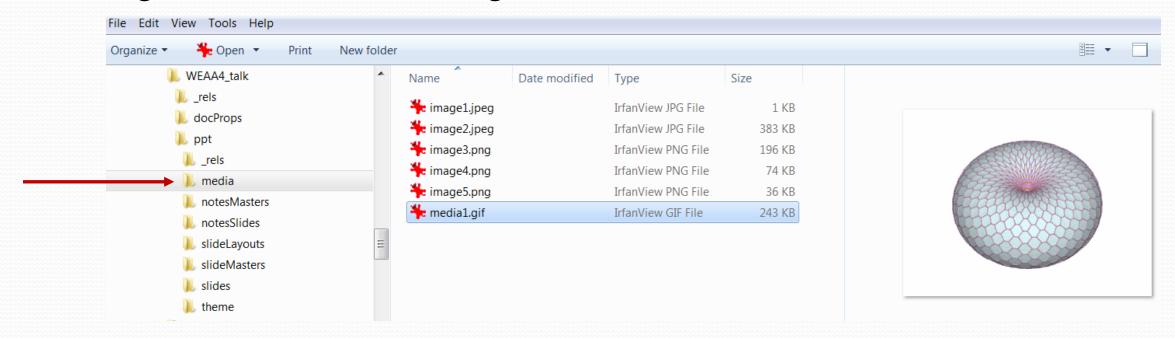
#### How to extract Media Files from PowerPoint Presentations

- In PowerPoint go to **File** and click **Save As**. Make sure you choose the .pptx format
- Go to the directory where you saved the presentation and rename the .pptx file to .zip
- Use an archive extractor tool, e.g. 7-zip, WinZip or (easier) just do a right-mouse-click to extract the .zip file contents



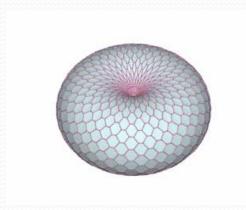
#### How to extract Media Files from PowerPoint Presentations

• All images, videos and animated gifs are saved in a subfolder named **media**:



- ▶ these media files (.gif, .avi, .wmv or whatever) must be converted to mpeg-4 for embedding in the PDF file
- ▶ Note: to reduce the size of extracted mpeg-4 files just use Handbrake and convert from mpeg-4 to mpeg-4 ©

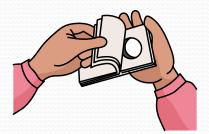
### animated gifs



#### Example

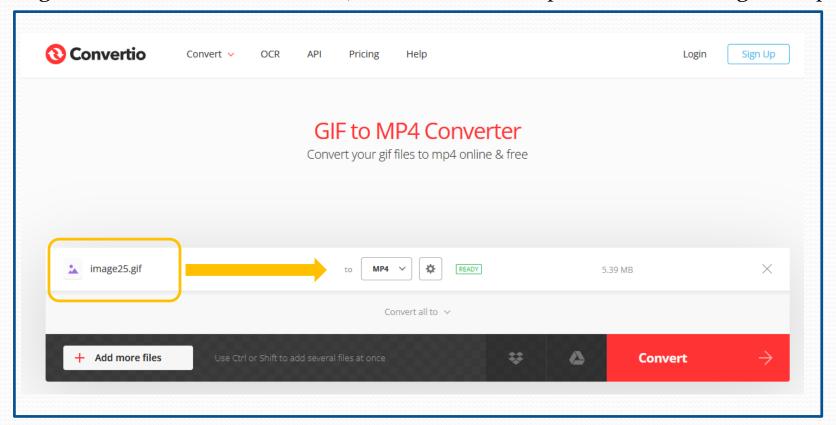
Reference: http://visualizingmath.tumblr.com/post/527 43559077/a-torus-consists-of-a-central-axiswith-a-vortex

• an animated gif is a type of gif image that can be animated by combining several images into a single file, like a flip-book

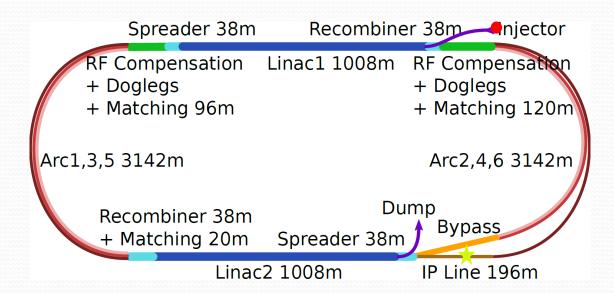


#### Transforming animated gifs to mp4 using Convertio

- **Convertio** is a powerful file converter
- converts animated gifs directly to mp4 online & free through the web browser <a href="https://convertio.co/gif-mp4/">https://convertio.co/gif-mp4/</a>
- ► faster then using VirtualDub and Handbrake (which takes two steps to convert from gif to mp4)

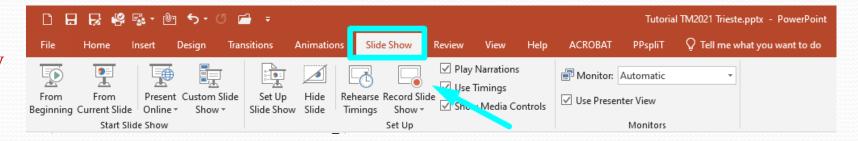


# Processing slides: How to deal with motion path animations

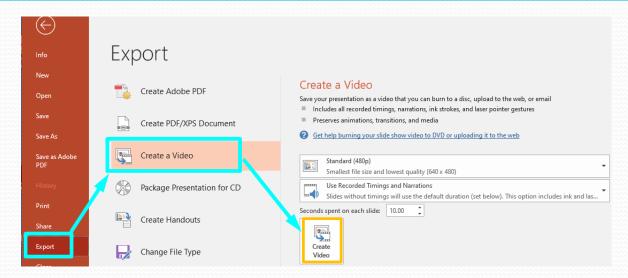


# **Motion Path Animations**

- motion path animations are a very special visual gimmick in PowerPoint presentations
- ▶ for embedding in PDF files they can be recorded and saved as a video file
- ► PowerPoint can record a slide show



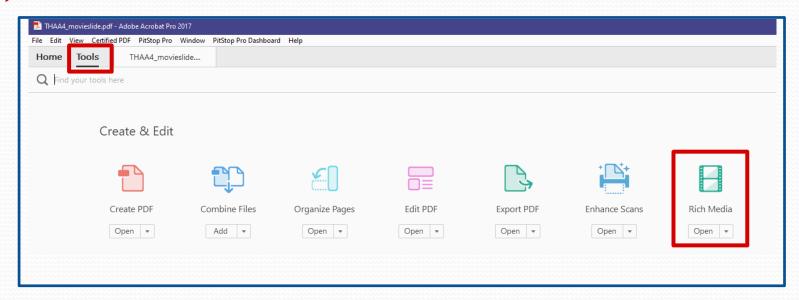
➤ After the slide has been recorded, click on File/Export and select 'Create a Video'. Save as type MPEG-4 video and embed the video in the PDF file.



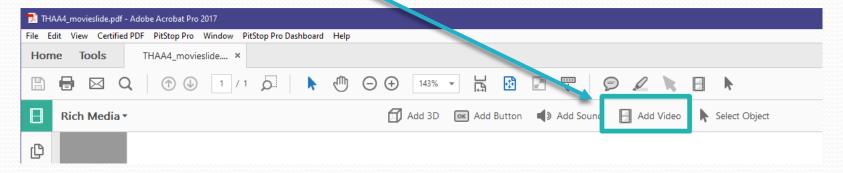
Processing slides:
How to insert mpeg-4 videos
in PDF documents

# How to insert videos in PDF documents

in Acrobat Pro click on Tools and select Rich Media

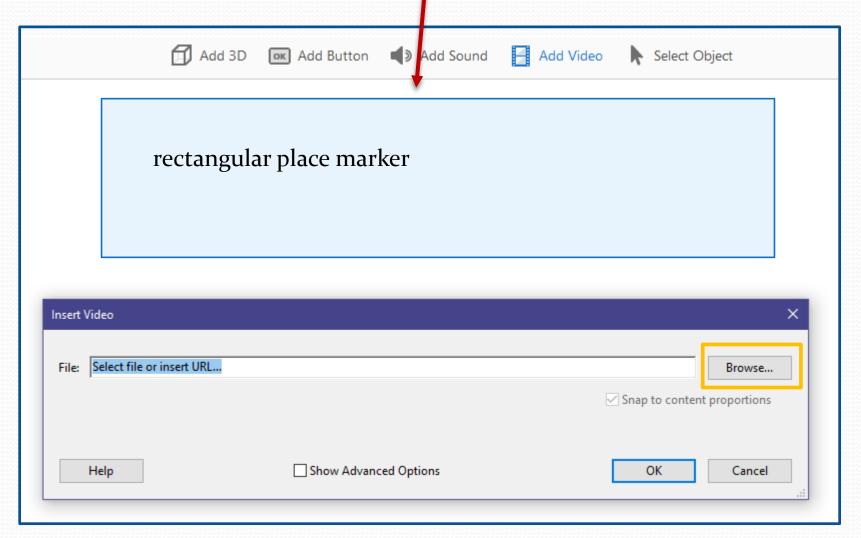


click on 'Add Video'

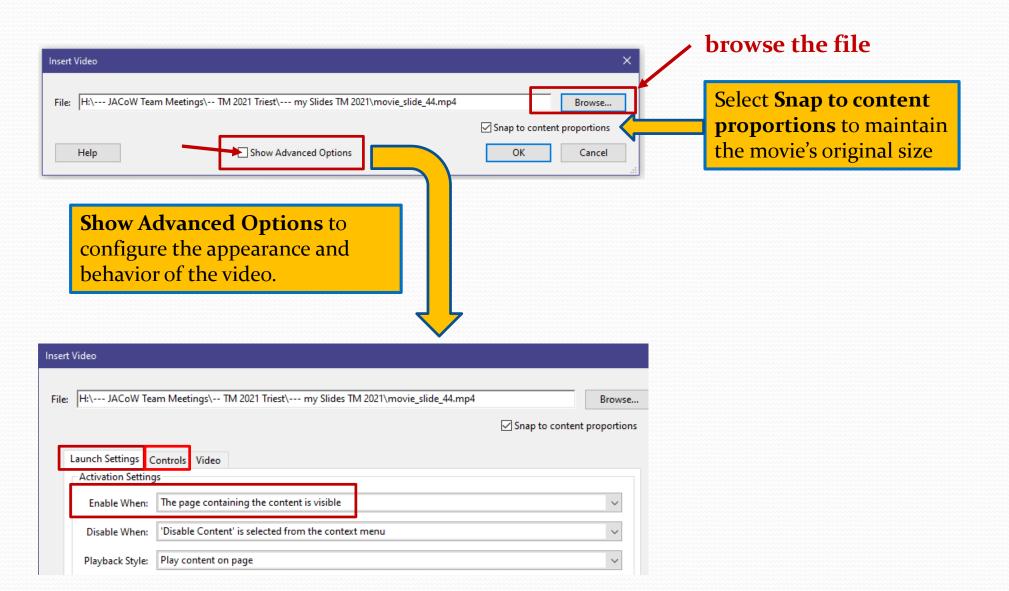


# How to insert videos in PDF documents

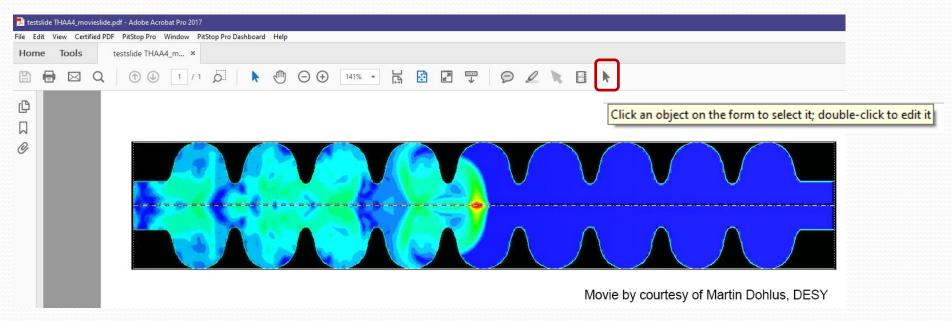
draw a place marker on the PDF slide or double-click the page to open the 'Insert Video' dialog box



# How to insert videos in PDF documents



# Modify videos in PDF documents



▶ to modify the **position** or the **size** of the video use the **Select Object tool** ▶



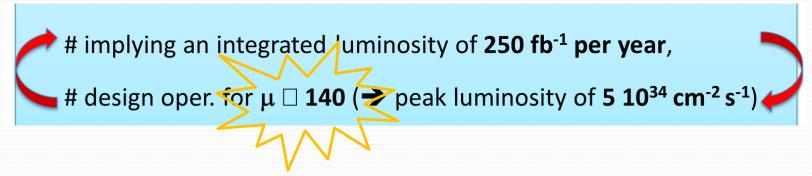
# **Processing Slides: Trouble-Shooting**



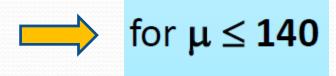
Processing Slides: Trouble-Shooting Missing characters

# Example: PPT slide containing text, symbols and numbers

▶ when running PowerPoint, not embedded characters appear as a blank box ☐ which is a placeholder for a missing font - quite hard to detect!



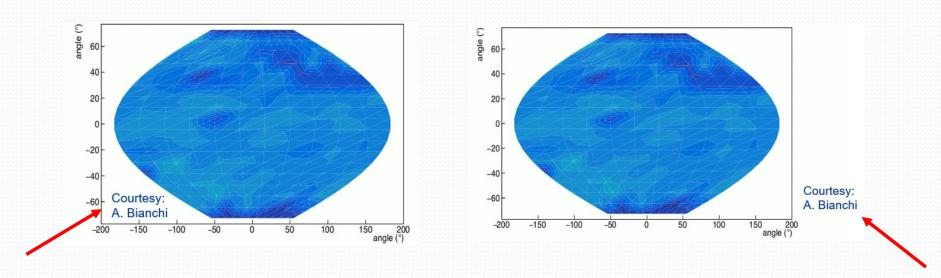
when you are not sure how to fix it, set status to RED and contact the author. The missing character in this example was a less than or equal sign!



Processing slides: Trouble-Shooting Shapes or captions covering videos

## Example: Shapes or captions covering videos

- it could happen that captions or shapes on a PPT slide are covering the video
  - they are not part of the video and will disappear after the conversion to PDF
- to fix this issue just move the text box before conversion from PPT to PDF



in this example the text box covering the animation has been moved to the right side

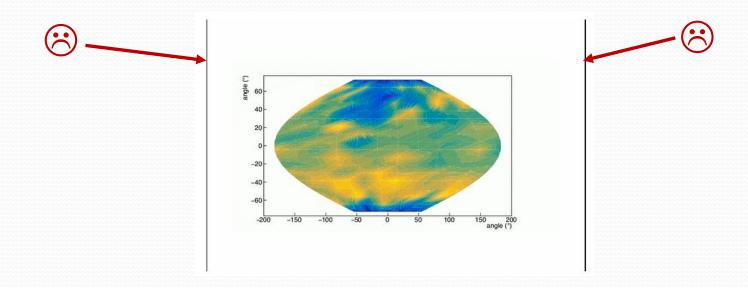
Example taken from A. Bianchi et al, "Temperature Mapping on a Niobium-Coated Copper Superconducting Radio-Frequency Cavity", arXiv:2305.09597 [physics.acc-ph], 2023

Processing slides: Trouble-Shooting

Embedded video in a PDF document
appears with a fragmented black frame

### Example: Black lines around an embedded video

- ► after a video has been embedded in the PDF file you see black lines surrounding the video ... this is a bug in Acrobat Adobe is not able or not willing to fix it <sup>⊗</sup>
- > try to get rid of the lines by changing the size of the video sometimes it works, sometimes not



Example taken from A. Bianchi et al, "Temperature Mapping on a Niobium-Coated Copper Superconducting Radio-Frequency Cavity", arXiv:2305.09597 [physics.acc-ph], 2023

# Thank you for your attention ©