

# Editing PDFs with Acrobat and Pitstop

Raphael Mueller – GSI, Germany JACoW Team Meeting 2024

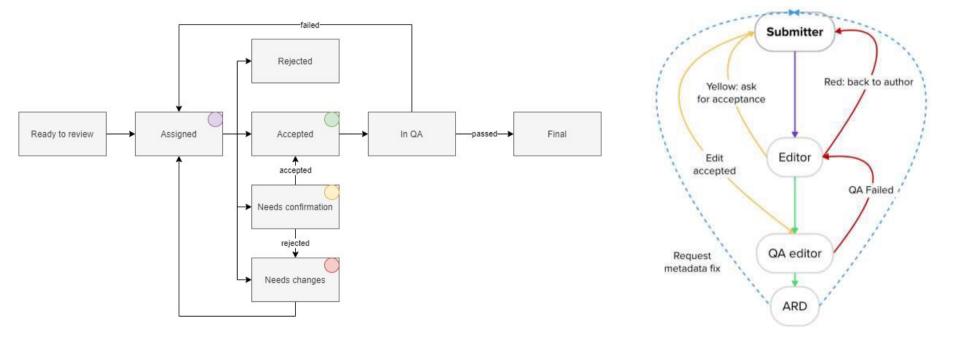




- Editing
  - Pre-Processing
  - Process / Verify
  - Post-Processing
- Quality Assurance
- Tips & Tricks
- Questions



### Editing & QA





### **Basic Processing Procedure**

- **Pre-Processing** 
  - Request a paper from Indico
  - Download PDF or ...
  - ... if not available download the source and convert to  $PDF \rightarrow$  usually leads to yellow dot.

(talks about Word and TeX processing before)

### **IFIC - JACoW Fake International Conference**

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### **Basic Processing Procedure**

- Process / Verify
  - Check fonts
  - Check page number
  - Check readability and display time
  - Apply the JACoW Crop Box
  - Check margins
  - Check page size
  - Check formatting and "Common Author Oversights"#
  - Check references (DOI, etc.)
  - Fix the problems
    - If you estimate it takes you extensive time to fix it, send it back to the author

### PAPER

#### # Overall document

#### Add item to group

- Crop paper first with Acrobat menu tool
- External margins
- Columns separation (toggle on/off column guides)
- Number of pages (+1 only for references)
- Fonts Embedded (except Type 3)
- # First page

Add item to group

- Authors' list: font institute grouping
- Title: All caps centered except sym
- Footnotes: email optional. Check position + margins + size

### # Headings (no numbering)

Add item to group

- SECTION HEADING
- Subsection Heading
- Third Level Heading (inline)
- 🗏 # Main text

Add item to group

- No Hyperlinks.
- Figure/Fig./Table together with number

### # Figures

Add item to group

- Unique + sequential numbering.
- Caption below image
- Figure X: Sentence case

Centered text (single line) or justified (multi-line).

Referenced in text (sequential).

### https://ipac-docs.jacow.org/PaperEditing/Editing/TemplateReview/

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#### # Tables

Add item to group

- Unique + sequential numbering.
- Caption above table
- Table X: Title Case (if Possible)
- Centered text (single line) or justified (multi-line)
- Referenced in text (sequential)..

Unique + sequential numbering (optional)

Unique + sequential numbering...

Referenced in text (sequential)...

journals + books nice to have

Journal names + Proceedings in italics

Check with RefDB/DOI.org/google search

# Printed version corresponds with screen

doi://10.12345/fancy-123: JACoW conferences: must have -

Well aligned ([9] vs [99])

### # Equations

Add item to group

Inside margins

# References

Add item to group

No Hyperlinks...

# **Basic Processing Check Fonts (1)**

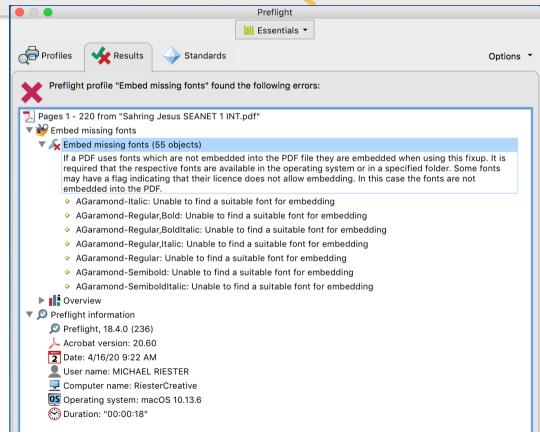


- Press Ctrl+D in Acrobat and open the "Fonts" Tab.
- Check that all the fonts are emedded.
- If not you can either go back to the source, and create a new PDF with properly embedded fonts, or ... (next slides)

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# Basic Processing Check Fonts (2) Preflight Embed Fonts

- Tools → Print Production → Preflight select the "PDF fixups" option and select.
  - "Embed missing fonts" and click "Analyze and fix" button to embed any unembedded fonts.
- Save the document.



# Basic Processing Check Fonts (3) Embed Manual

- Open the Inspector with Ctrl+Alt+I and select the text you want to change with the PitStop selection tool.
- 2. Select the Text panel in the inspector.
- 3. Press on the "select font" button (the small one with the two letters on it).
- 4. Select the font you want to use for the selected part of the text.
- 5. Check the "Embed font" box so that your font is embedded into the document.
- 6. Press apply to finish your changes.

### Abstract

In 2011, we upgraded a 201 MHz buncher in the proton. injector for the alternating gradient synchrotron (AGS) –.

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# Basic Processing Apply the JACoW Crop Box



- In the File Menu of Acrobat select "Crop and Save" from the JACoW Utilities.
- If the PDF is not already in JACoW paper size, this will crop it to the appropriate size.
- If the PDF looks weird (e.g. shifted off page) the PDF was not created with the proper settings and you should go back to the source.

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# Basic Processing Check Margins & Page Size



- If Acrobat is configured properly...
- Press Ctrl+U in Acrobat and activate the "Grid". Check that the text stays inside of the grid.
- Check the page size at the bottom of the window: it should be 595 x 792 pt.

#### EFFECTS OF GRIDS IN DRIFT TUBES

M. Okamura<sup>#</sup>, BNL, Upton, NY 11973, USA H. Yamauchi, TIME Co., Hiroshima, Japan

#### Abstract

In 2011, we upposed a 201 MHz buncher in the proton injector for the alterming product synchronic (AGS) – relativistic barry ion collider (RHC) complex. In the buncher we institle four just, and so f margons to improve the transit time factor. The pril institled duft occurs of four quadhart. The quadhant was cut cut precisely from luma fluck margine plats by a computerised manically controlled. (CNN wire cutting electrical discharge machining (EDM). The 3D electric field of the grid was inmilated.

#### BACKGROUND

In 2010, we modified a 750 keV medium energy beam transport (MEBT) line of proton injector of AGS RHIC complex in Brookhaven National Laboratory (BNL)[1,2]. The MEBT has four quadrupole magnets, four steering and the buncher within 700 mm where is between the radio frequency quadrupole (RFO) and drift tube linear accelerator (DTL). The installed buncher in 2010 had a half wavelength  $\pi$  mode resonant structure and was machined from a single aluminum block. The inner surface was treated by Alocrom 1000 and the treatment worked well to suppress the secondary electron emission efficiency. The buncher was driven by a 5 kW of RF power amplifier, however the beam transmission measurement indicated that more RF voltage of the buncher might improve the longitudinal matching condition between the RFO and DTL. Then we built and installed a new high Q copper made buncher to gain a better effective shunt impedance with a newly designed erids. The buncher has two eans and four erids were installed. The grids help to improve the transit time factor (TTF), however they introduce non-linear field. In this report, we describe simple two-dimensional (2D) analysis results based on a three-dimensional (3D) field simulation. Due to the change of the material, the loaded Q value of the buncher was improved from 2120 to 3600 and the shunt impedance reached 2.0 MΩ. The installed ouncher at the MEBT section is shown at Fig. 1



Figure 1: The new copper buncher. \*Work supported by US\_DOE\_fekamura@bal.gov

#### MECHANICAL STRUCTURE OF THE GRIDS

Since the grids are exposed to high current proton beams, the material stands for high temperature condition in vacuum. We used tungsten carbide. A photo of the grid is shown at Fig. 2.





Figure 3: The grid in a mockup drift tube.

The inner diameter of the surrounding circle is 32 mm which fits to inner surface of the drift tubes. The drift tubes have groves those are 1 mm depth and 1 mm width to accommodate grids. The grid consists of four quadrants connected by phosphor bronze springs. The each quadrant was machined from sineb. Imm thickness tunesten nation

### **Basic Processing Check Margins & Page Size**



- Use the column guides (blue lines) to check that column spacing is correct
- Remember to switch them off again after checking, they are an addition to the document and can be saved with it

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xperimental racinty and win eam power to the MLF has been MW. In addition to the beam loss a stable operation by keeping a is also highly required to ensure a lower emittance and less beam cal simulations and systematic ried out to minimize the beam s by reducing the foil scattering nd mitigating the space charge udinal and transverse injection bnance corrections, chromaticity s using a higher energy spread beam loss and the beam emitand minimizing been helps for

been adopted in the RCS [2–4]. The TP area is simultaneously varied to control transverse emittance of the extracted beam between MLF and the MR [5]. A large TP of 200  $\pi$  mm-mrad is applied for the MLF beam to minimize circulating beam hitting on the foil to reduce foil scattering uncontrolled beam losses and also for a longer foil lifetime [6–12]. It is also essential to minimize beam density on the Mercury target to reduce its pitting damage. On the other hand, a relatively smaller TP of 50  $\pi$  mm–mrad is used for the MR to realize a smaller emittance to minimize beam loss at the beam transport and also in the MR. However, it gives one order of magnitude higher average foil hitting of 62 for each injected proton as compared to that only 6.5 for the MLF as can be realized from the simulated beam distri-

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Ctrl+O

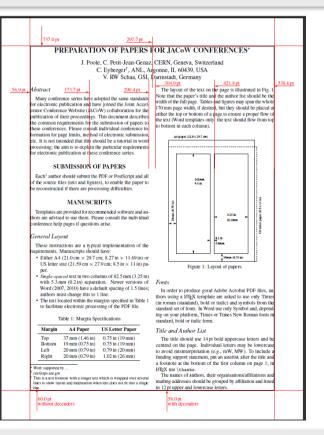
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Ctrl+S

# Basic Processing Check Margins & Page Size



 A Paper measurement Cheat-Sheet was provided by Volker that shows all the measurements. If you are unsure and want to check.



# Basic Processing Formatting and "Common Author Oversights"



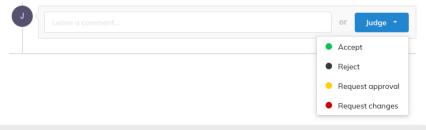
- Compare with the template
  - https://www.jacow.org/index.php?n=Authors.MSWord
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- Check "Formatting Citations"
  - https://www.jacow.org/index.php?n=Authors.FormattingCitations
- Check "Common Author Oversights"
  - https://www.jacow.org/index.php?n=Editors.CommonAuthorOversights



# **Basic Processing Procedure**

- Post-Processing (1)
  - Print, and also check visually
  - Dot the paper (using JACoW Utilities)
    - Green
      - Nothing is wrong, no further action required
    - Yellow
      - Source file changed, Author should proofread
    - Red
      - Extensive work necessary, author should fix and resubmit
      - Or, Author should come to the proceedings office
  - Upload ALL processed files to Indico
  - Use Indico to set status and error codes

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### **Basic Processing Procedure**

- Post-Processing (2)
  - Send clear instructions back to the author.
  - Green  $\rightarrow$  Did you fix something in the PDF?
  - Yellow → What did you change/needs to be checked?
  - Red → What needs to be changed before resubmitting the paper?

### WEE1

Thank you for your effort, nice JACoW compliant paper, just embedded missing fonts.

• [FP01] Fonts not embedded

### TUP04 🔴

Thank you for your effort, but some minor corrections are necessary:

- [MP04] The abstract should not contain references, it should be a stand-alone entitiy. Please move the
  references elsewhere.
- [MP04] Except for DOIs there should be not hyperlinks in the text, please remove it from the footnote.
- [TC03] Table captions should be title cased
- [TC04] Figure captions should be aligned justified if they are multi-line, also the label should be seperated by a ":" and not a "-" and it should end with a full stop
- [TC06, TC14] Please use DOIs where possible and use the reference formatting according to Annex B. Reference indentation is not correwct, DOIs should be monospaced at the end etc. ( please have a look here https://github.com/JACoW-org/JACoW\_Templates/raw/master/LaTeX/A4/JACoW\_LaTeX\_A4.pdf )

### MOP04 😑

Thank you for your effort, some corrections were necessary:

- [TC01] Title should be upper cased in the paper
- [TC01] Affiliation in wrong font and author upper cased
- [TC02] Subsection heading should be title cased
- [TC02] Wrong paragraph indentation
- [TC04] Figure captions in wrong style and not properly positioned
- [TC04] Figure captions should start uppercase and have a full stop
- [TC05] Footnote formatting incorrect (i put star instead of number)
- [FP01] Fonts not embedded
- [UT01] Margins of the template were completly wrong
- [TC06, TC14] Please use for future conferences the reference formatting according to Annex B (see https://github.com/JACoW-org/JACoW\_Templates/raw/master/LaTeX/A4/JACoW\_LaTeX\_A4.pdf)

### TUP01 🔶

Thank you for your effort, some minor corrections were necessary:

- [TC01] The title should be upper-cased in the paper
- [TC03] Table captions should be title cased
- [TC04] Figure captions should be aligned justified if they are multi-line
- [TC08] Figure 5 was mislabeled as Figure 1
- [MP02] AKNOLEGEMENT -> ACKNOWLEDGEMENT
- [MP02] Institute or Modern Physics -> Institute of Modern Physics
- [TC06, TC14] Please use DOIs where possible and use the reference formatting according to Annex B ( see https://github.com/JACoW-org/JACoW\_Templates/raw/master/LaTeX/A4/JACoW\_LaTeX\_A4.pdf )

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# **Quality Assurance (1)**

- From the "Papers to QA" bin take a printed paper that you did not process
- Search for the paper in the list of editables in Indico and open it
- Download the PDF using the editor QA interface in Indico
- Check the requirements (again)
  - Technical (fonts, page size, performance, etc.)
  - General Appearance (Common Author Oversights)

PDF	Presentations	Source Files
TUOCA2.PDF	No files uploaded	TUOCA2.docx
Source files for papers	Supporting files for papers	
TUOCA2.docx	No files uploaded	
QA02: QA Pending TC_02: Text	formatting incorrect (paragraphs, section)	🛃 Download



- If everything is Ok
  - Select "Approve QA" and submit
- If anything is NOT Ok
  - Select "Fail QA"
  - Normal case:

Last timeline change will roll back and the paper will go back to the original editor and he can fix it

- Or (not recommended):
  - If you need only to do minimal changes, reassign the paper to yourself and fix it
  - $\rightarrow$  someone else should do final QA on it



- Editing
  - Pre-Processing
  - Process / Verify
  - Post-Processing
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- Tips & Tricks
- Questions

# Tips & Tricks



- How to ... https://www.jacow.org/Editors/TipsTricksforProcessing
  - paint over unintentional objects with Pitstop
  - move objects with Pitstop
  - use advanced search for checking reference and figure numbering
  - remove/hide hyperlinks using PitStop
  - scale items with PitStop
  - add a missing footnote separator
  - convert an EPS/PS to a bitmap image using GIMP (this can be helpful if you want to replace a slow rendering EPS/PS Figure with a faster Bitmap)

### **Shortcuts**



- PitStop Shortcuts
  - https://www.enfocus.com/manuals/ReferenceGuide/PP/24/enUS/home.html#en-us/common/ppr/r eference/re\_shortcuts.html
- Acrobat Shortcuts
  - http://helpx.adobe.com/acrobat/using/keyboard-shortcuts.html



- Editing
  - Pre-Processing
  - Process / Verify
  - Post-Processing
- Quality Assurance
- Tips & Tricks
- Questions



### **Questions?**

