Type assigned paper number here

Type manuscript page number here

All text must fit in this box
DO NOT draw box on manuscript

Leave 1.5" (38 mm) above title

Typing Format Instructions for the Proceedings of the International Cryocooler Conference

1" (25 mm)

3 blank 12-point-type lines

F. T. Author and S. D. Author

Cryocooler Research Affiliation
City, State, Country xxxxx

1/2 blank line (0.1")

3 blank 12-point-type lines

ABSTRACT

These paper format instructions are typed in the required format for camera-ready manuscripts for the ICC proceedings. As with the past several conferences, the proceedings will be published as a hardcover book titled *Cryocoolers 23*. Typing format guidelines are provided for type fonts, line spacing, margins, artwork quality, and treatment of references. The format guidelines are required to provide a uniform look to the book and to expedite its preparation.

To expedite the production of the Proceedings, your primary input will be a *Microsoft-Word electronic version* of your manuscript. However, an additional high-resolution PDF electronic copy is also useful for resolution of any readability or layup issues with the MS-Word manuscript. Like our recent past proceedings, *Cryocoolers 23* will be printed in COLOR. Thus, authors are encouraged to use color graphics in their manuscripts, but to also make sure the color is easily interpretable for those that may print papers in B&W.

To avoid having your paper rejected for major problems, strictly follow these format guidelines and pay particular attention to the "Figure Internal Font and Line-Weight Guidelines" on Pg. 3 and the "How to Avoid Paper Returns for Rework," attached as page 5 of these instructions.

No blank line

1½ blank lines (0.3")

1/2 blank line (0.1")

INTRODUCTION

The manuscript must follow the dimensions, layout, and style specifications described in these instructions. Gross violations of these instructions will result in rejection of the paper. Microsoft Word typing templates are available on the conference web site for formatting ICC papers on either 8½×11 or A4 size paper. The completed manuscript should be carefully checked for typographical, grammatical, and format errors, and to confirm the text block is sized as noted below, with each page filled from top to bottom. Also, be sure to include a signed copyright form and reviewer hard copies when handing in your manuscript.

PAPER TYPING FORMAT

1/2 blank line (0.1")

Paper Size and Margins

1/2 blank line (0.1")

All text and graphics of the camera-ready manuscript must fit within a text box that is **6.5" wide by 10.4" high** (165 mm by 264 mm), and formatted for **A4** or **letter-size** (8½ × 11") paper. **A4** size paper is preferred as it provides sufficient margins for the running heads and page numbers. **Try to completely fill the full height and width of the text box** so as to provide

10.4" (264 mm)

6.5" (165 mm)

uniform margins in the finished book. Each manuscript page will be reduced to 78% of the camera-ready size in the final printing; thus the final text area in the published volume will be 5.05" (128 mm) wide by 8.11" (206 mm) high. These guidelines also illustrate the added page number and the chapter/title running head that will be added by the publisher.

Electronic Manuscript Submittal Format

As noted above, authors are required to upload your manuscript as a *Microsoft-Word electronic document* using the ICC website's Manuscript Upload page. However, an additional high-resolution PDF camera-ready copy is also useful during editing to resolve any font readability or layup issues with the MS-Word manuscript. This will allow the editors to quickly make minor corrections found during the editing and production process. The electronic manuscript may be provided in either *.doc or *.docx format. If an Acrobat (PDF) version is also submitted for readability issues, ensure that all fonts are embedded and that graphics have been reproduced at high resolution (600 dpi Zip Compression for line art & 300 dpi medium jpeg compression for photos). See the upload site instructions for the file name to use with your manuscript.

Digital Art and Photos. Because PDF file generation and printing will occur directly from your electronic manuscript, it is important that it contain high-resolution digital images (300 dpi TIF or JPG continuous-tone art and up to 600 dpi B&W line art). Avoid placing MS Word "boxes" around graphs and figures, and try to use BLACK graph axes and text labels to achieve high contrast in the final reproduced art.

Manuscript Length, Page Charges, and Copyright Release Form

In general, manuscripts should be **10 or less pages in length**. For papers that exceed 10 pages, the author must enclose a payment of $50 per page for each page over ten pages. Make checks payable to the International Cryocooler Conference, drawn on a U.S. bank, in U.S. dollars.

As with any commercial publication, a **signed copyright release form** must be supplied with each manuscript. Please Upload a completed and signed copyright release form with your camera-ready manuscript; blank forms are available on the ICC website.

Page Numbering and Labeling

Number all pages in the top right corner of each page, outside of the text area. Type your assigned paper number in the top left corner of each page, outside of the text area.

Type Faces, Font Sizes and Line Spacing

Body Text. The manuscript body should be typed using full-justification in a 12-point Times-style font with a line spacing of 0.194" (14-point leading). Start each paragraph with a first-line indent of 0.3" (8.4 mm).

Leave NO blank line above text paragraphs that have no heading, subheading, or sub-sub-heading, such as this one.

Title. The title should be left justified and located 1.5" (38 mm) below the top margin. Type the title in lowercase with first letters capitalized, and use 21 pt. ICCTitle font with a line spacing of 0.32" (23-point leading). The ICCTitle font is available for download from the conference website for PC computers; if the proper font is unavailable, use 21 pt. Arial, and the title will be replaced during publication.

Author Block. Place three blank 12-point-type lines between the title and the authors' names, and ½ blank line (0.1") between the authors' names and their affiliation. Indent the author block 1" (25 mm) from the left margin and use **12 point Times Bold** font for the authors' names. Place three blank 12-point lines between the authors' address and the word **ABSTRACT**.

Headings and Subheadings. Use **12 point Times Bold** font for headings and subheadings. Use all capital letters for main headings. Subheadings and sub-subheadings should be lowercase

Paper title running head will be applied here on odd pages

7 pt. Arial Regular
0.35 pt. line (0.005") (minimum acceptable line)
0.7 pt. line (0.01") (good general purpose line)
1.5 pt. line (0.02")
9 pt. Arial Regular
9.5 pt. Arial Regular

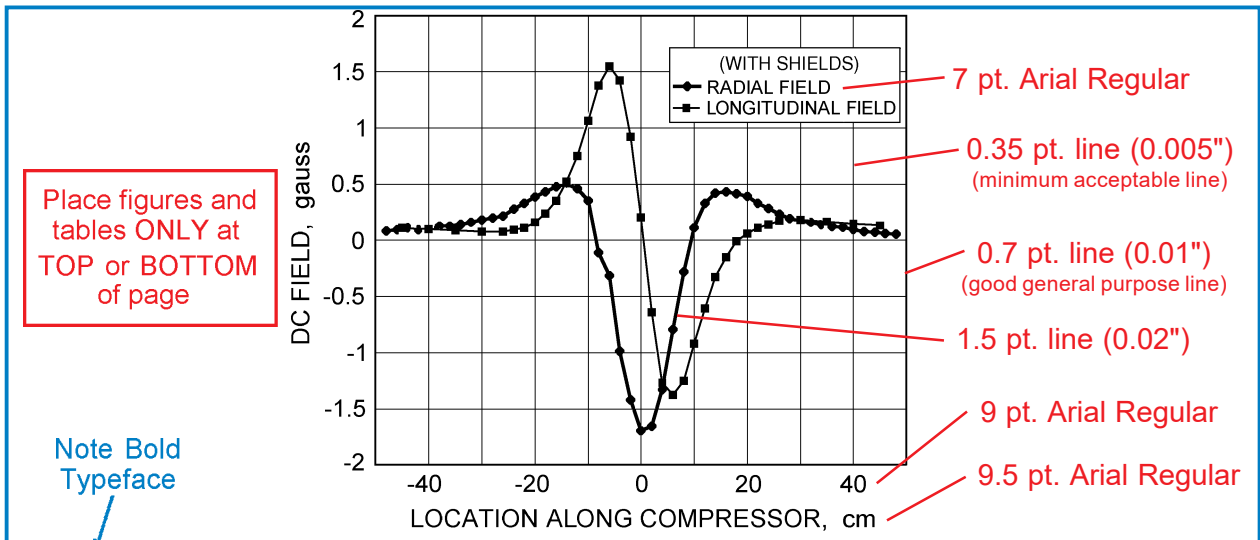Place figures and tables ONLY at TOP or BOTTOM of page

Note Bold Typeface

Figure 1. Example figure using preferred font sizes and line weights (from *Cryocoolers 10* Pg. 775).

with first letters capitalized. Headings and subheadings should be left-justified on a separate line; place 1½ blank lines (0.3") above **MAIN HEADINGS** and ½ blank line (0.1") below. Place one blank line (0.2") above **subheadings** and ½ line (0.1") below. **Sub-subheadings** should have ½ blank line (0.1") above and be run into the first line of the paragraph.

$$\text{Power} = 3\mu \times (x\text{-}y)^3 \qquad (1)$$

0.2" (5 mm)

Equations. Center equations left to right on the page; indent equation number 0.2" (5 mm) from the far right, enclosed in parentheses. Refer to equations using the abbreviation: Eq. (x).

1½ blank lines (0.3")

FIGURES AND TABLES

Location and Positioning

Position figures and tables ONLY at the **top** or **bottom** of a page, or below another figure or table, and center figures left to right. **DO NOT run body text opposite figures**; however, two figures may be placed side-by-side if space permits, and a figure caption may be placed opposite a figure to save space. Figures should be located at the **top** or **bottom** of the first page where they are referenced, or as soon thereafter as possible.

Captions and Text References

Figures. Each figure should have a short descriptive caption and must be referenced by number in the text. Number figures with Arabic numerals, and capitalize only the first word and proper names in the caption. If possible, figure captions should be typed in an **11-point** font; this will visually separate the captions from the normal 12-point text. Bold the **Figure X** part of the caption as shown in Fig. 1. Short captions should be centered under the figure (see Fig. 1), and multi-line captions should word-wrap at the side margins and use a first-line indent of 0.3". Captions may also be placed alongside narrow figures to save space.

Tables. Tables should be treated just like figures EXCEPT that the descriptive caption is centered **above** the table in a **12-point** font with first letters capitalized, e.g. **Table 1**. Example Table Caption. The *contents* of the table should be typed in an **11-point** font. Footnotes to tables appear at the bottom of the table, not at the bottom of the page.

Figure Internal Font and Line-Weight Guidelines

Figure 1 illustrates the preferred font sizes and line weights for use in **camera-ready art** contained in your manuscript. Lettering in art should be no smaller than 7-point, and should be no larger than 11 point; remember that the art and text will be reduced to 78% in the final book.

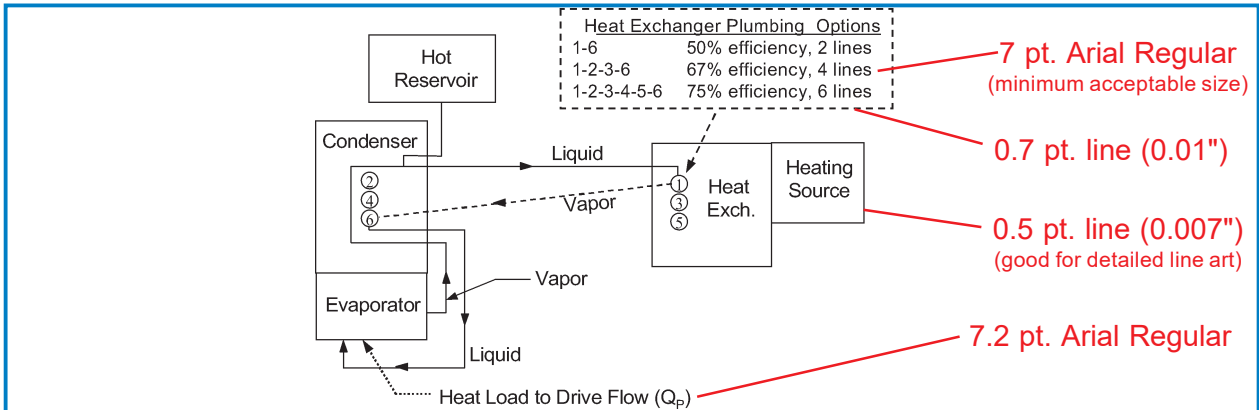*Text box for illustration only, DO NOT draw box on manuscript*

Figure 2. Example of *minimum* font sizes and line weights (from *Cryocoolers 10,* p. 677).
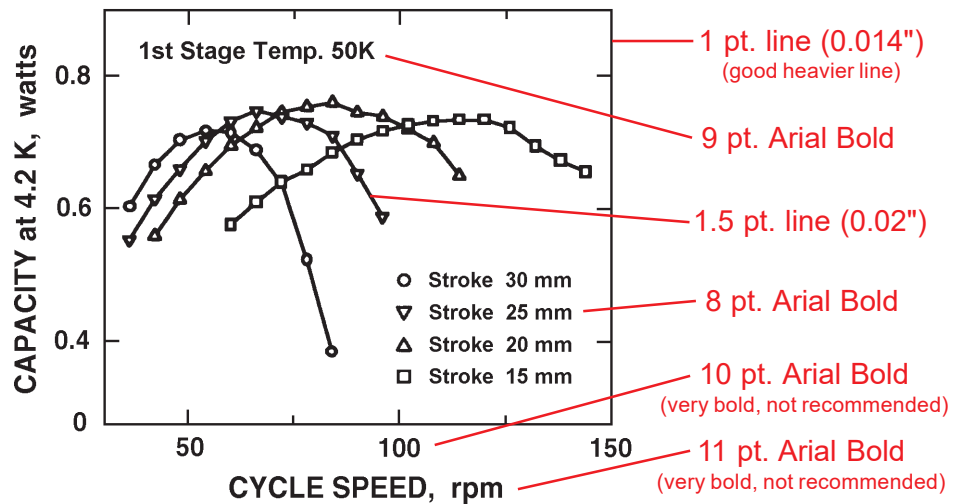

Figure 3. Example of *maximum* font sizes and line weights (from *Cryocoolers 10,* p. 577).

Figures 2 and 3 demonstrate minimum and maximum allowable font sizes and line weights.

Use of Color in Paper Art

Although, the proceedings book will be printed on a 600 dpi color press, the author should strive to make all art work legible and interpretable when printed in Black & White. In particular, colored lines in graphs should be labeled with unique symbols or arrows that retain their identity when printed in B&W. With this caveat, the use of colored art is highly recommended, as the Proceedings Book and the PDF web papers will be reproduced in full color.

ACKNOWLEDGMENT

Financial and institutional support may be acknowledged with other appropriate information in an "acknowledgment" section located at the end of the paper, just before the references.

REFERENCES

Number references sequentially in the text, using either superscript numbers, e.g. Jones[3] or brackets, e.g. Jones [3]. References should be typed in **11-point font**, in the format below.

1. Author, F.T., "Title of Article," *Journal Name*, Vol. 31, No. 468 (1968), pp. 451-459.

2. Author, F.T., *Book or Report Title*, Report Number, Publisher, City (1967), pp. 357-362.

3. Author, F.T., "Title of Paper in the 18th International Cryocooler Conference," *Cryocoolers 18,* ICC Press, Boulder, Colorado (2014), pp. 353-362.

Top Eight Reasons for Paper Rework

The following are the top 8 causes requiring papers to be reworked. To avoid having your paper reworked, make sure these paper elements are correct.

1. **Poor English grammar, wrong words, spelling errors, and obvious typos.** This is the most common problem and, if not corrected, reflects poorly on the author and the editor/publisher. Carefully proofread your manuscript and remember to run the spell checker!

2. **Incorrect Margins.** Failure to use the required margins for the pages is a surprising common problem. Always measure the dimensions of the final manuscript text to confirm that it is 10.4"×6.5" (264×165 mm). Note that failure to fill the entire page from top to bottom is the same as using the wrong top or bottom margin and would lead to a short page in the final book if not corrected. Check also to verify that the title/author block is correctly formatted with the proper indent and spacing from the top of the first page.

3. **Use of nonstandard fonts for symbols.** When a nonstandard font is used for text or figure symbols (bullets, math, or Greek symbols) the symbols may not reproduce correctly when the electronic manuscript is opened by the Proceedings editing staff. To resolve this problem always save your Word manuscript using the "Embed TrueType fonts" option. This can be found by going in Word to **Tools ≫ Options**. On the **Save** tab, check "Embed TrueType fonts." Similarly, if submitting your manuscript as a PDF file, be sure to check "Embed all fonts" on the **Job Options ≫ Fonts** setup tab.

4. **Incorrect figure placement**. To provide a uniform look to the final published pages, all figures are required to be either at the top or bottom of the page.

5. **Low-resolution continuous-tone photos or computer-rendered art**. For continuous-tone art such as photographs to reproduce well in the finished book they need to have a resolution of at least 200 dpi, and preferably 300 dpi. A common problem with manuscripts supplied as Acrobat PDF files is the use of Acrobat's default 72 dpi for figure-art down sampling and compression. To correct this problem, make sure that the downsampling level in Acrobat is set to 300 dpi, and use medium or high quality JPEG compression.

6. **Figure text too small or too large.** Computer-generated figure art imported from other applications often contains internal text (graph axis labels or figure element labels) that is either too small to be readable in the final book, or is too large to appear balanced with respect to the body text. Figures 1 to 3 of the attached "Typing Format Instructions for the Proceedings of the International Cryocooler Conference" provide recommendations and acceptable ranges for font sizes and line weights in camera-ready figure art. Remember that the final art in the published book will be reduced to 78% of the size of the camera-ready art submitted to the publisher. Art not conforming to the style guidelines has to be reworked.

7. **Poor quality line art.** To reproduce well in the proceedings book, line art such as graphs, drawings and tables should be generated as high-resolution, medium-weight black lines. Color or graytone lines and text are not recommended as they will be halftoned into fine dots in the printing process, making them fuzzy and unsharp. Lines on a graph that use color to differentiate them should be given a line structure or labeling that make them readable when reproduced in B&W. Another common problem with line art is unacceptably fine lines (one-pixel-wide lines generated by some graphics programs). Fine lines should be increased in weight following the guidelines presented in Figs. 1 to 3 of the attached "Typing Format Instructions for the Proceedings of the International Cryocooler Conference."

8. **Use of wrong fonts.** Although rare, occasionally an author fails to use a Times-style font for the text, figure captions, and section headings. In this regard, we discourage the use of LaTeX with is Computer Modern font, as it is distinctly different from a Times-style font. Note that use of a Arial-style font for labeling *internal to figures* is not only acceptable, but is preferred to provide visual separation from the body text.