Title of Your Submission

Subtitle (Optional)

Authors Name/s per 1st Affiliation *(Author)*
line 1 (of *Affiliation*): dept. name of organization
line 2: name of organization, acronyms acceptable
line 3: City, Country
line 4: e-mail address if desired

Authors Name/s per 2nd Affiliation *(Author)*
line 1 (of *Affiliation*): dept. name of organization
line 2: name of organization, acronyms acceptable
line 3: City, Country
line 4: e-mail address if desired

Note to authors: This document provides a template for the submission of abstracts, to be considered for inclusion at the conference. It also serves as a template for proceedings papers, to be submitted after the conference.

Abstracts can be one or two pages long and should include references as appropriate. The abstract can be divided into sections (here I–V), or briefer abstracts can be a single body of text. Figures and tables are encouraged but not required. For guidance on including them, see Section V subsection D. of the template appendix. A two-page abstract in accordance with the template assists its review.

EFTF-IFCS 2027 provides a path to a peer-reviewed publication in IEEE Xplore. The review of the abstract is the first step on this path. IEEE reserves the right to exclude a submission from distribution after the conference, including exclusion from IEEE Xplore, if the submission does not meet IEEE standards for scope and/or quality. We therefore encourage all authors to provide an abstract that follows the IEEE guidelines in this template.

Any reviewed and accepted two-page abstract can be directly resubmitted for publications in the conference proceedings. All such resubmitted abstracts that pass a final submission review will be uploaded to IEEE Xplore.

Authors that submitted an accepted two-page abstract will also have the option to expand their submission to a proceedings article of any reasonable length. IEEE Xplore will publish all proceedings articles that pass a final peer-review by the Technical Program Committee and are found appropriate by the Editorial Chair.

Presenters at EFTF-IFCS 2027 are not required to contribute to the proceedings, but the conference chairs and the supporting societies much appreciate all submitted articles!

Reminder: Authors that have not yet completed their PhD at the time of submission may enter their paper in the student competition.

[*Delete this preamble prior to submission.*]

Identify applicable sponsor/s here. If no sponsors, delete this text box.

Summary — Succinctly describe what the main results of your research are and why they are important for the community. This summary can be several sentences long.

Keywords—component; formatting; style; insert (*key words****)***

I. Introduction

Describe the context of your work and why it is important. Cite prior work appropriately, including your own publications that contribute to the work presented here. Identify what is new about the work you have done and how it differs from previous work. Identify key new concepts and/or results demonstrated in your work. If possible, start the last sentence in the Introduction with "Here we show…" or an equivalent statement succinctly summarizing what is new in your submission [1].

II. Methods/Results

Describe what you did. What was the experimental setup or theoretical approaches you used? What quantities were calculated or what did you measure [2]? Present data or theoretical plots relevant to any interpretation you find later and supporting the conclusions you draw.

III. Discussion/Interpretation

What do your results mean? How do the results lead to a deeper or expanded understanding of the topic or inform future work?

IV. Conclusions

What conclusions can you draw from your work? Summarize what you have shown in the submission and discuss next steps for the work [3]. Why is your work important and where will it lead? What new possibilities or opportunities are enabled by your work and how does it contribute to other work going on in the community [4]?

V. Use of AI Generated Content

Disclose any use of content generated by artificial intelligence (AI), including but not limited to text, figures, images, and code, as required by IEEE. Identify the AI system that was used, the sections where it was used, and the level at which it was used to generate content [5]. For example, this template made use of several large language models as thesaurus and dictionary.

ACKNOWLEDGMENT

Many compliments are given to Dr. Nils Nemitz of NICT for upgrade of this 2027 template.

REFERENCES

[1] G. Eason, B. Noble, and I. N. Sneddon, “On certain integrals of Lipschitz-Hankel type involving products of Bessel functions,” Phil. Trans. Roy. Soc. London, vol. A247, pp. 529–551, April 1955. *(references)*

[2] J. Clerk Maxwell, A Treatise on Electricity and Magnetism, 3rd ed., vol. 2. Oxford: Clarendon, 1892, pp.68–73.

[3] I. S. Jacobs and C. P. Bean, “Fine particles, thin films and exchange anisotropy,” in Magnetism, vol. III, G. T. Rado and H. Suhl, Eds. New York: Academic, 1963, pp. 271–350.

[4] K. Elissa, “Title of paper if known,” unpublished.

[5] R. Nicole, “Title of paper with only first word capitalized,” J. Name Stand. Abbrev., in press.

TEMPLATE APPENDIX

I. STANDARDS FOR PUBLISHED CONTENT

A. Plagiarism

IEEE defines plagiarism as the reuse of someone else's prior processes, results, or words without explicitly acknowledging the original author and source. It is important for all contributing authors to recognize that plagiarism in any form, at any level, is unacceptable and is considered a serious breach of professional conduct, with potentially severe ethical and legal consequences. Authors should be aware that a plagiarism check will be carried out on all submitted abstracts and proceedings papers.

B. Use of previously published work (self-use)

For any material published in the proceedings and uploaded to IEEE Xplore, authors may choose to use their own previously published work as a basis for a new submission. If so, they are required to cite the previous work and very briefly indicate how the new submission to this conference offers substantive novel contributions beyond those of the previously published work. For detailed information, see the IEEE Publication Services and Products Board (PSPB) Operations Manual at https://www.ieee.org/opsmanual.pdf, Sections 8.1.7.F and 8.2.4.G.

II. STYLE TEMPLATE (*HEADING 1*)

Formatting to this template, modified in MS Word 2016 and saved as a "Word Document (.docx)" for Mac or PC, provides authors with most of the specifications needed for preparing electronic versions of their papers. All standard paper components have been specified for three reasons: (1) ease of use when formatting individual papers, (2) automatic compliance to electronic requirements that facilitate the concurrent or later production of electronic products, and (3) conformity of style throughout a conference proceedings. Margins, column widths, line spacing, and type styles are built-in; examples of the type styles are provided throughout this document and are identified in italic type, within parentheses, following the example. Some components, such as multi-leveled equations, graphics, and tables are not prescribed, although the various table text styles are provided. The formatter will need to create these components, incorporating the applicable criteria that follow.

III. EASE OF USE

A. Selecting a Template (Heading 2)

First, confirm that you have the correct template for your paper size. This template has been tailored for output on the US-letter paper size, which is what will ultimately be used for the proceedings.

B. Maintaining the Integrity of the Specifications

The template is used to format your paper and style the text. All margins, column widths, line spaces, and text fonts are prescribed; please do not alter them. You may note peculiarities. For example, the head margin in this template measures proportionately more than is customary. This measurement and others are deliberate, using specifications that anticipate your paper as one part of the entire proceedings, and not as an independent document. Please do not revise any of the current designations. The following margins settings will be enforced (top: 0.75in, bottom: 1.0in, left/right: 0.63in) or in mm (top: 19.1mm, bottom: 25.4mm, left/right: 15.9mm).

IV. PREPARE YOUR PAPER BEFORE STYLING

Before you begin to format your paper, first write and save the content as a separate text file. Keep your text and graphic files separate until after the text has been formatted and styled. Do not use hard tabs, and limit use of hard returns to only one return at the end of a paragraph. Do not add any kind of pagination anywhere in the paper. Do not number text heads-the template will do that for you.

Finally, complete content and organizational editing before formatting. Please take note of the following items when proofreading spelling and grammar:

A. Abbreviations and Acronyms

Define abbreviations and acronyms the first time they are used in the text, even after they have been defined in the abstract. Abbreviations such as IEEE, SI, MKS, CGS, sc, dc, and rms do not have to be defined. Do not use abbreviations in the title or heads unless they are unavoidable.

B. Units

- Use either SI (MKS) or CGS as primary units. (SI units are encouraged.) English units may be used as secondary units (in parentheses). An exception would be the use of English units as identifiers in trade, such as "3.5-inch disk drive".
- Avoid combining SI and CGS units, such as current in amperes and magnetic field in oersteds. This often leads to confusion because equations do not balance dimensionally. If you must use mixed units, clearly state the units for each quantity that you use in an equation.
- Do not mix complete spellings and abbreviations of units: "Wb/m^2" or "webers per square meter", not "webers/m2". Spell out units when they appear in text: ". . . a few henries", not ". . . a few H".
- Use a zero before decimal points: "0.25", not ".25". Use "cm^3", not "cc". (*bullet list*)

C. Equations

The equations are an exception to the prescribed specifications of this template. You will need to determine whether or not your equation should be typed using either the Times New Roman or the Symbol font (please no other font). To create multileveled equations, it may be necessary to treat the equation as a graphic and insert it into the text after your paper is styled.

Number equations consecutively. Equation numbers, within parentheses, are to position flush right, as in (1), using a right tab stop. To make your equations more compact, you may use the solidus (/), the exp function, or appropriate exponents. Italicize Roman symbols for quantities and variables, but not Greek symbols. Use a long dash rather than a hyphen for a minus sign.

Punctuate equations with commas or periods when they are part of a sentence, as in

$$a + b = \gamma \quad (1)$$

Note that the equation is centered using a center tab stop. Be sure that the symbols in your equation have been defined before or immediately following the equation. Use "(1)", not "Eq. (1)" or "equation (1)", except at the beginning of a sentence: "Equation (1) is . . ."

D. Some Common Mistakes

- The word "data" is plural, not singular.
- The subscript for the permeability of vacuum μ_0, and other common scientific constants, is zero with subscript formatting, not a lowercase letter "o".
- In American English, commas, semi-/colons, periods, question and exclamation marks are located within quotation marks only when a complete thought or name is cited, such as a title or full quotation. When quotation marks are used, instead of a bold or italic typeface, to highlight a word or phrase, punctuation should appear outside of the quotation marks. A parenthetical phrase or statement at the end of a sentence is punctuated outside of the closing parenthesis (like this). (A parenthetical sentence is punctuated within the parentheses.)
- A graph within a graph is an "inset", not an "insert". The word alternatively is preferred to the word "alternately" (unless you really mean something that alternates).
- Do not use the word "essentially" to mean "approximately" or "effectively".
- In your paper title, if the words "that uses" can accurately replace the word "using", capitalize the "u"; if not, keep using lower-cased.
- Be aware of the different meanings of the homophones "affect" and "effect", "complement" and "compliment", "discreet" and "discrete", "principal" and "principle".
- Do not confuse "imply" and "infer".
- The prefix "non" is not a word; it should be joined to the word it modifies, usually without a hyphen.
- There is no period after the "et" in the Latin abbreviation "et al.".
- The abbreviation "i.e." means "that is", and the abbreviation "e.g." means "for example".

V. Using the Template

After the text edit has been completed, the paper is ready for the template. Duplicate the template file by using the Save As command, and use the naming convention prescribed by your conference for the name of your paper. In this newly created file, highlight all of the contents and import your prepared text file. You are now ready to style your paper; use the scroll down window on the left of the MS Word Formatting toolbar.[1]

A. Title and Subtitle Capitalization

Title and subtitle capitalization are the most common misapplied formatting in our conference submissions. In general, capitalize all words with four or more letters. Words with less than four letters should be capitalized, unless they are used as:

Articles, "the, a, an"
Conjunctions, "and, as, but, if, or, nor"
Prepositions, "at, by, for, in, of, off, on, to, up"

Capitalize the first word following a dash or colon in your title and subtitle. Short prepositions such as "in, up" should be capitalized if used in a compound way with a longer preceding preposition, e.g. "Findings In Photonic Circuits".

B. Authors and Affiliations

The template is designed so that author affiliations are not repeated each time for multiple authors of the same affiliation. Please keep your affiliations as succinct as possible (for example, do not differentiate among departments of the same organization). This template was designed for two affiliations.

1) For author/s of only one affiliation (Heading 3): To change the default, adjust the template as follows.

a) Selection (Heading 4): Highlight all author and affiliation lines.

b) Change number of columns: Select the Columns icon from the MS Word Standard toolbar and then select "1 Column" from the selection palette.

c) Deletion: Delete the author and affiliation lines for the second affiliation.

2) For author/s of more than two affiliations: To change the default, adjust the template as follows.

a) Selection: Highlight all author and affiliation lines.

b) Change number of columns: Select the "Columns" icon from the MS Word Standard toolbar and then select "1 Column" from the selection palette.

c) Highlight author and affiliation lines of affiliation 1 and copy this selection.

d) Formatting: Insert one hard return immediately after the last character of the last affiliation line. Then paste down the copy of affiliation 1. Repeat as necessary for each additional affiliation.

e) Reassign number of columns: Place your cursor to the right of the last character of the last affiliation line of an even numbered affiliation (e.g., if there are five affiliations, place your cursor at end of fourth affiliation). Drag the cursor up to highlight all of the above author and affiliation lines. Go to

[1] An excellent style manual for science writers is The Technical Writer's Handbook by M. Young, published by The MIT press, 2003.

Column icon and select "2 Columns". If you have an odd number of affiliations, the final affiliation will be centered on the page; all previous will be in two columns.

C. Identify the Headings

Headings, or heads, are organizational devices that guide the reader through your paper. There are two types: component heads and text heads.

Component heads identify the different components of your paper and are not topically subordinate to each other. Examples include Acknowledgment and References and, for these, the correct style to use is "Heading 5". Use "figure caption" for your Figure captions, and "table head" for your table title. Run-in heads, such as "Abstract", will require you to apply a style (in this case, italic) in addition to the style provided by the drop down menu to differentiate the head from the text.

Text heads organize the topics on a relational, hierarchical basis. For example, the paper title is the primary text head because all subsequent material relates and elaborates on this one topic. If there are two or more sub-topics, the next level head (uppercase Roman numerals) should be used and, conversely, if there are not at least two sub-topics, then no subheads should be introduced. Styles named "Heading 1", "Heading 2", "Heading 3", and "Heading 4" are prescribed.

D. Figures and Tables

a) Positioning Figures and Tables: Place figures and tables at the top and bottom of columns. Avoid placing them in the middle of columns. Large figures and tables may span across both columns. Figure captions should be below the figures; table heads should appear above the tables. Insert figures and tables after they are cited in the text. Use the abbreviation "Fig. 1", even at the beginning of a sentence.

TABLE I. TABLE TYPE STYLES

Table Head	**Table Column Head**		
	Table column subhead	***Subhead***	***Subhead***
copy	More table copy[a]		

[a] Sample of a Table footnote. (*Table footnote*)

Figure Labels: Use 8 point Times New Roman for Figure labels. Use words rather than symbols or abbreviations when writing Figure axis labels to avoid confusing the reader. As an example, write the quantity "Magnetization", or "Magnetization, M", not just "M". If including units in the label, present them within parentheses. Do not label axes only with units. In the example, write "Magnetization (A/m)" or "Magnetization {A[m(1)]}", not just "A/m". Do not label axes with a ratio of quantities and units. For example, write "Temperature (K)", not "Temperature/K".

We suggest that you use a text box to insert a graphic in an MSWord document. This method is somewhat more stable than directly inserting a picture.

To have non-visible rules on your frame, right click and select "Format Shape" > Shape Options > Line > No Line.

You can even include the figure caption (see Fig. 1 caption for format) inside the box. This way, you can be sure that the caption remains with the figure even if things move around.

For plots and drawings, the images themselves should be lossless formats such as TIFF, PNG, or EPS (with all fonts embedded), ideally at 300 dpi resolution.

Fig. 1. Figure caption should look like this. Use 8 pt font Times New Roman. Do not italicize. (figure caption)

ACKNOWLEDGMENT *(HEADING 5)*

The preferred spelling of the word "acknowledgment" in America is without an "e" after the "g". Avoid the stilted expression "one of us (R. B. G.) thanks ...". Instead, try "R. B. G. thanks...". Put sponsor acknowledgments in the unnumbered footnote on the first page.

REFERENCES

The template will number citations consecutively within brackets [1]. The sentence punctuation follows the bracket [2]. Refer simply to the reference number, as in [3]—do not use "Ref. [3]" or "reference [3]" except at the beginning of a sentence: "Reference [3] was the first ..."

Number footnotes separately in superscripts. Place the actual footnote at the bottom of the column in which it was cited. Do not put footnotes in the reference list. Use letters for table footnotes.

Unless there are six authors or more give all authors' names; do not use "et al.". Papers that have not been published, even if they have been submitted for publication, should be cited as "unpublished" [4]. Papers that have been accepted for publication should be cited as "in press". Capitalize only the first word in a paper title, except for proper nouns and element symbols [5]. This does not apply to the paper title of this paper, see V.A. of this Appendix.

For papers published in translation journals, please give the English citation first, followed by the original foreign-language citation.