

# WPTC2018 Paper Template for L<sup>A</sup>T<sub>E</sub>X (Modified from IMS2018 Template)

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**Abstract**—This is a custom-formatted WPTC paper template that includes built-in L<sup>A</sup>T<sub>E</sub>X styles for the various components of your paper. For example, this paragraph is formatted in the abstract environment using the IEEEtran L<sup>A</sup>T<sub>E</sub>X class.

**Index Terms**—5G mobile communication, internet of things, power amplifiers, wearable sensors, wireless power transmission.

## I. INTRODUCTION

This template is provided to help you prepare your initial paper submission to WPTC, and if it gets accepted, the final paper as well. Please read through this entire template before you start writing your paper! This will save you and the WPTC Technical Program Committee considerable time, and improve your chances for acceptance.

Authors should remember that:

- 1) Initial paper submissions should be *three or four pages* (including all figures, tables, references, etc.), must be in PDF format, and cannot exceed **2 MB**.
- 2) Acceptance rates for WPTC have historically run at approximately 60%. There is insufficient space within the WPTC Technical Program to accept all submissions.

## II. DETAILED TEXT FORMATTING

Please use this custom-formatted WPTC paper template that includes built-in L<sup>A</sup>T<sub>E</sub>X styles designed to make each WPTC paper uniform. All submissions must adhere to the guidelines embodied in this document such as font size, line and paragraph spacing, margin and column width, etc. All of these features are automatically built into this template using customized L<sup>A</sup>T<sub>E</sub>X styles based on the IEEEtran L<sup>A</sup>T<sub>E</sub>X class [1]. For reference, Table I summarizes the equivalent Microsoft Word formatting details.

### A. Document Settings

Using 8.5 × 11-in paper, the top margin is 0.75 in, the bottom margin is 1 in, and the left and right margins are 0.625 in. Except for the Title, Authors, and Affiliations, use a double-column format. The column width and spacing are 3.5 and 0.25 in, respectively.

All paragraphs, including the abstract, figure captions, and references, should be justified at the left *and right* edges. Automatic hyphenation for the entire document is enabled.

### B. Title and Author List

The Title, Author, and Affiliation sections are formatted using the `\title` and `\author` commands, respectively.

### C. Abstract and Index Terms

The maximum abstract length required for the online paper-submission system is limited to 150 words, but the abstract length for the paper itself can be longer. Following the abstract, list in alphabetical order 5–7 IEEE-approved index terms [2] describing your paper. IEEE search engines use these index terms to quickly locate your paper.

### D. Headings and Body Text

Major sections use the `\section` command and are numbered using Roman numerals, except for ACKNOWLEDGMENT and REFERENCES, which use the `\section*` command. Subsections use the `\subsection` command. Paragraph bodies of text use the default 10-pt font associated with the IEEEtran class.

### E. Equations

Equations are entered using the `eqnarray` environment, as shown here:

$$\oint \mathbf{E} \cdot d\mathbf{L} = -\frac{\partial}{\partial t} \iint \mathbf{B} \cdot d\mathbf{S}. \quad (1)$$

Note that a period is placed at the end of the equation to properly punctuate the previous sentence. Ensure that subscripts in your equations are legible. When referring to an equation, refer to “(1)” rather than “equation (1)”, except at the beginning of a sentence: “Equation (1) shows...”

## III. FIGURES AND TABLES

Figures should utilize as much of the column width as possible to maximize legibility. Using a sans-serif font such as 8- to 10-pt Helvetica or Arial usually results in greater legibility than Times New Roman. *Do not use any font smaller than 8 pt!* When referring to a figure, use the abbreviation “Fig.” followed by the figure number.

L<sup>A</sup>T<sub>E</sub>X accepts PDF and encapsulated postscript files as figures, which are inserted using the `figure` environment. Standard postscript figures will not expand and contract to fill the designated area on the page. Encapsulated postscript files will. Thus, encapsulated postscriptfiles must obviously be only one page long. It is often easy to convert a postscript file to encapsulated postscript. In Linux this can be done with the command, “`ps2epsi`.”

Place figure captions directly below each figure using the `\caption` command. Do not lump all figures at the end of the paper!

TABLE 1  
SUMMARY OF TYPOGRAPHICAL SETTINGS

Section	Font Specifics (Times Roman unless specified)			Paragraph Description				
	style	size	special	line	before	after	Alignment	Indent (in inches)
Title	plain	17	none	single	0	18	centered	none
Author List	plain	11.5	none	single	0	3	centered	none
Affiliations	plain	10	none	single	0	0	centered	none
Abstract	bold	9	none	exactly 10	0	0	justified	0.125 1 <sup>st</sup> line
Index Terms	bold	9	none	exactly 10	0	0	justified	0.125 1 <sup>st</sup> line
Headings	plain	10	small caps	exactly 12	18	6	centered	none
Subheadings	italic	10	none	exactly 12	6	6	left	none
Body Paragraphs	plain	10	none	exactly 12	0	0	justified	0.125 1 <sup>st</sup> line
Equations	Symbol font for special characters			single	6	6	centered	none
Figures	8- to 10-pt sans serif (Helvetica)			single	12	0	centered	none
Figure Captions	plain	8	none	exactly 10	10	10	justified	none, tab at 0.5
References	plain	8	none	exactly 10	0	0	justified	0.25 hanging

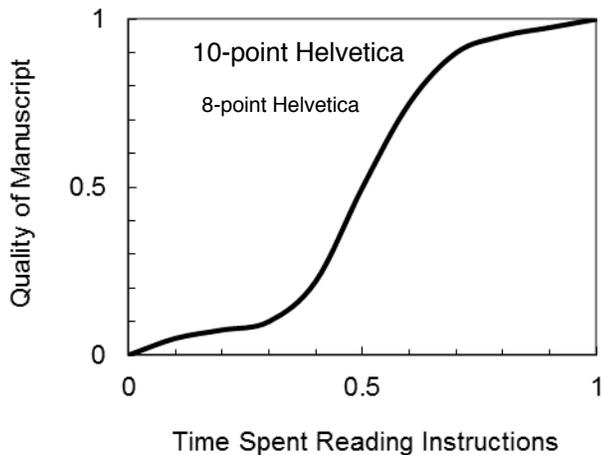


Fig. 1. Estimated relationship between the time an author spends reading these instructions and the quality of the author's digest article.

If you decide to use color traces in your graphical data, be absolutely certain that there is no ambiguity about your graphical information when printed on a B&W printer.

Tables are inserted using the `table` environment. Table I illustrates one of the rare instances when the double-column format requirement can be violated.

#### IV. CITING PREVIOUS WORK

Use the `\cite` command to reference an electronic-only source [1], [2], journal article [3], conference digest article [4], magazine article [5], or book [6]. To simultaneously cite these references [1]–[6] use the format just demonstrated. The reference list is the last section and references are listed in the order cited.

References should be detailed. For journal articles, list all authors by initials and last name, the title of the paper in quotations (capitalizing only the first letter of the first word), the journal name in italics, the volume number, the issue number, the page numbers, and the date. Use the examples provided [1]–[12] as a guide. For additional examples of how to properly format your references, as well as other paper-writing tips, refer to [7].

To equalize the column lengths on the last page, use the `\vfil\eject` or `\IEEEtriggeratref` commands. For example, this document contains the `\IEEEtriggeratref{8}` command to manually insert a column break before [8].

#### V. CREATION OF THE PDF FILE

Authors are required to submit their initial paper in PDF format using their own conversion software. The initial paper does not have to be compatible with IEEE Xplore. Remember to adhere to the 4-page limit and the 2-MB file-size limit. Authors should check the WPTC2018 website ([www.wptc2018.org](http://www.wptc2018.org)) for the most up-to-date instructions. As always with a conversion to PDF, authors should *very carefully* check a printed copy.

#### VI. CONCLUSION

A number of sources are available to help you write your WPTC paper [8]–[12]. Following that advice and these instructions will improve the quality of your paper and the WPTC Digest. If you have questions, please contact the Technical Program Committee chairs at [wptc2018@polymtl.ca](mailto:wptc2018@polymtl.ca).

#### ACKNOWLEDGMENT

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