Preparation of Abstracts for the IACAS Conference

First A. Author[*] and Second B. Author[†]

Business or Academic Affiliation, City, Zipcode, Country

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Another Business or Academic Affiliation, City, Zipcode, Country

These instructions give you guidelines for preparing abstracts for the Israel Annual Conference on Aerospace Sciences - IACAS. Use this document as a guide if you are using LATEX 2$_\varepsilon$. Otherwise, use this document as an instruction set. Do not cite references in the abstract summary. The footnote on the first page should list additional information, such as the job title, department, e-mail address, etc. for each author.

I   Introduction

This document is a LATEX template. The `iacas` class uses Computer Modern (CM) fonts, which are part of any standard TEXinstallation. Use the LATEX files for formatting purposes, but please see `author_guide.pdf` for specific layout instructions. Authors will first need to save the `iacas` files (`iacas.cls` and `iacas.bst` provided with this distribution) to their working directory or install them into their TEX distribution.

II   Abstract Requirements

The abstract must be 800-2000 words. The submission must include sufficient detail to demonstrate the purpose of the work, the technical foundation for the topics to be discussed, any preliminary results to date, including key figures, equations, tables, and references, as appropriate. Sufficient information must be included in the submission to convince the IACAS organizers and reviewers that the authors will be able to present the work at the conference. You are requested to use the instructions in this template to organize your abstract. The same template should be used for the full paper, if you are planning to submit one after abstract acceptation.

III   Procedure for Abstract Submission

All abstracts are to be submitted electronically via the IACAS submission site at controls.papercept.net. You can also access the submission site via the conference website at iacas.technion.ac.il. If there are problems submitting the abstract please contact the Secretary of the Program Committee quoting the submission number so it can be easily traced.

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IV Detailed Formatting Instructions

IV.A Document Text

The default font for IACAS abstracts written in LaTeX is 12-point Computer Modern (CM).

IV.B Title, Authors' Names, and Affiliations

The title of your abstract should be coded as `\title{Abstract Title}`. It will be type set automatically in capitals and centered at the top of the page. The names of the authors, business or academic affiliation, city, and country should follow on separate lines below the title. The names of authors with the same affiliation can be listed on the same line above their collective affiliation information. The authors' names, contact information, and affiliation is coded within LaTeX's standard `\author` using `tabular` environment conventions and the `\thanks` and `\and` commands. The affiliation line for each author includes the author's city, zip/postal code and country. The contact information for each author is given by the `\thanks` command and could include the job title, department name, and e-mail address. Author names are centered, and affiliations are centered and in italic type. The title is created by the `\maketitle` command. For example,

```
\documentclass{iacas}
 \title{Abstract Title}
 \author{%
   Moshe Levi \thanks{Professor. Email: moshe.levi@technion.ac.il.}
   and Haim Cohen
   \thanks{Graduate Student. Email: haim.cohen@technion.ac.il.} \\
   {\itseries Faculty of Aerospace Engineering, Technion, Haifa,
   32000, Israel} \\
   \and
   Someone Else\thanks{Job Title, Department, E-mail.}\\
   {\itseries Another Business or Academic Affiliation, City,
   Zipcode, Country}
 }
\begin{document}
\maketitle
```

IV.C Headings

IACAS conference style defines 3 levels of section headings:

Level 1 heading (`\section`): bold, larger font, centered, and numbered with Roman numerals.

Level 2 heading (`\subsection`): bold, flush left, and numbered with capital letters. No opening paragraph indentation.

Level 3 heading (`\subsubsection`): italic, flush left, and numbered with Arabic numbers (e.g., 1, 2, 3). No opening paragraph indentation.

IV.D Abstract Summary

An abstract summary should appear at the beginning of your abstract. It should be one paragraph long (not an introduction) and complete in itself (no reference numbers). It should indicate subjects dealt with in the abstract and state the objectives of the investigation. Newly observed facts and conclusions of the experiment or arguments discussed in the abstract should be stated in summary form; readers should not have to read the full abstract to understand the abstract summary.

IV.E Footnotes

Footnotes, where they appear, should be placed above the 1-inch margin at the bottom of the page. To insert footnotes, use `\footnote{}` as normal. Footnotes are formatted automatically in `iacas.cls`, but if another medium is used, they should appear in as superscript lower case letters. When adding notes to tables, e.g., as accommodated by the `threeparttable` package, the symbols should be in the sequence *, †, ‡, §, ¶, ‖, **, ††, and so forth. This sequence should begin anew with each table.

IV.F References

List and number all bibliographical references at the end of the abstract. Corresponding numbers in square brackets are used to cite references in the text using the `\cite{}` command [1]. Multiple citations are sorted and punctuated automatically through the iacas's use of the `cite` package. Ranges of reference are separated by an en-dash [1–3] and separate reference numbers are shown with commas [1, 2, 4]. Reference citations in the text should be in numerical order, which is assured by using BibTeX.

In the reference list, give all authors' names; do not use "et al." unless there are six authors or more. Papers that have not been published should be cited as "unpublished"; papers that have been submitted or accepted for publication should be cited as "submitted for publication." Private communications and personal Web sites should appear as footnotes rather than in the reference list.

References should be cited according to the standard publication reference style. (For examples, see the "References" section of this template.) This is facilitated by the BibTeX database and a style file, `iacas.bst`. As a rule, all words are capitalized except for articles, conjunctions, and prepositions of four letters or fewer. Names and locations of publishers should be listed; month and year should be included for reports and papers.

In the Reference section at the end of this guide you can see some samples of bibliography entries of various type (articles, books, etc.) Not all of those references were used in this text. The entire list, included in the `bibtex_database.bib` sample file, was generated using the `\cite{*}` command. []

IV.G Images, Figures, and Tables

All artwork, captions, figures, graphs, and tables will be reproduced exactly as submitted. Be sure to position any figures, tables, graphs, or pictures as you want them printed.

Place figure captions below all figures; place table titles above the tables.[a]If your figure has multiple parts, include the labels "a)," "b)," and so on, below each subfigure and above the figure caption. This can be accomplished with the `subfigure` package. Please

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[a]Please do not include captions as part of the figure image itself.

verify that the figures and tables you mention in the text actually exist by using LaTeX's `\label` and `\ref` mechanisms and verifying that there are no undefined references during typesetting.

Figures and tables are referred to as 'Floats' in LaTeX, reflecting their floating nature. They are typically numbered whether or not they have a caption and they are floated to the first available position near the first reference to that figure/table within the text. This is accomplished by placing the figure/table environment after their first reference. By default, floats are placed at the top of the first available page, the bottom of the page, or one a page consisting entirely of floats.
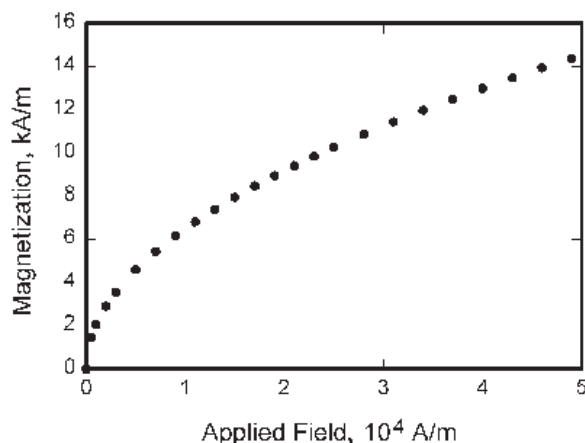

Figure 1. Magnetization as a function of applied field. This figure demonstrates the dangers of using a bitmap as opposed to a vector image.

Table 1 was typeset using the `threeparttable` package (see `author_guide.tex` for specifics).

Table 1. This is an example of a `threeparttable` which uses the `dcolumn` package to allow for columns to be aligned on decimal points.

First head*	Second head	Third head	$V_M(r)$
center	doctor	0.2	10.55
tab	dentist	0.15	33.12
worse	man†	10.58	45.10
better	home	43.9	12.34

   * This is a table footnote, which to span multiple lines, has been greatly extended in length contrary to reason.

   † A much shorter table footnote.

IV.H Equations

Equations are centered and numbered consecutively, with equation numbers in parentheses flush right. Several examples of such equations are:

$$L\left(\mu; t, x, z\right) = \frac{1}{2\pi} \int_{-1}^{\infty} \frac{\partial \mu\left(t, x'\right)}{\partial x'} \frac{\left(x - x'\right) dx'}{\left(x - x'\right)^2 + z^2}, \tag{1}$$

$$\mathbf{J}_i \cdot \Delta \underline{x}_{i+1} = -\underline{f}_i, \tag{2}$$

and

$$I_0(x) = \sum_{n=0}^{\infty} \left(\frac{x^n}{2^n n!} \right)^2. \tag{3}$$

IV.I Page Numbering

Please don't number the pages of the manuscript. It will be done automatically by the system.

IV.J General Grammar and Preferred Usage

Use only one space after periods or colons. Hyphenate complex modifiers: "zero-field-cooled magnetization." Avoid dangling participles, such as, "Using Eq. (1), the potential was calculated." [It is not clear who or what used Eq. (1).] Write instead "The potential was calculated using Eq. (1)," or "Using Eq. (1), we calculated the potential."

Use a zero before decimal points: "0.25," not ".25." Use "cm^3," not "cc." Indicate sample dimensions as "0.1 cm $\times$ 0.2 cm," not "0.1 $\times$ 0.2 cm^2." The preferred abbreviation for "seconds" is "s," not "sec." Do not mix complete spellings and abbreviations of units: use "Wb/m^2" or "webers per square meter," not "webers/m^2." When expressing a range of values, write "7 to 9" or "7–9," not "7 9."

A parenthetical statement at the end of a sentence is punctuated outside of the closing parenthesis (like this). (A parenthetical sentence is punctuated within parenthesis.) In American English, periods and commas are placed within quotation marks, like "this period." Other punctuation is "outside"! Avoid contractions; for example, write "do not" instead of "don't." The serial comma is preferred: "A, B, and C" instead of "A, B and C."

If you wish, you may write in the first person singular or plural and use the active voice ("I observed that ..." or "We observed that..." instead of "It was observed that ..."). Remember to check spelling. If your native language is not English, please ask a native English-speaking colleague to proofread your abstract.

The word "data" is plural, not singular (i.e., "data are," not "data is"). The subscript for the permeability of vacuum μ_0 is zero, not a lowercase letter "oo." The term for residual magnetization is "remanence"; the adjective is "remanent"; do not write "remnance" or "remnant." The word "micrometer" is preferred over "micron" when spelling out this unit of measure. 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). Use the word "whereas" instead of "while" (unless you are referring to simultaneous events). Do not use the word "essentially" to mean "approximately" or "effectively." Do not use the word "issue" as a euphemism for "problem." When compositions are not specified, separate chemical symbols by en-dashes; for example, "NiMn" indicates the intermetallic compound $Ni_{0.5}Mn_{0.5}$ whereas "Ni–Mn" indicates an alloy of some composition Ni_xMn_{1-x}.

Be aware of the different meanings of the homophones "affect" (usually a verb) and "effect" (usually a noun), "complement" and "compliment," "discreet" and "discrete," "principal" (e.g., "principal investigator") and "principle" (e.g., "principle of measurement"). Do not confuse "imply" and "infer."

Prefixes such as "non," "sub," "micro," "multi," and "ultra" are not independent words; they should be joined to the words they modify, usually without a hyphen. There is no period after the "et" in the abbreviation "et al." The abbreviation "i.e.," means "that is," and the abbreviation "e.g.," means "for example" (these abbreviations are not italicized).

V Conclusion

A conclusion section is not required, though it is preferred. Although the conclusions may review the main points of the abstract summary, do not replicate the abstract summary as the conclusions. The conclusions should elaborate on the importance of the work or suggest applications and extensions.[b]

Acknowledgments

The preferred spelling of the word "acknowledgment" in American English is without the "e" after the "g." Avoid expressions such as "One of us (S.B.A.) would like to thank...[.]" Instead, write "F. A. Author thanks...[.]" Sponsor and financial support acknowledgments are also to be listed in the acknowledgments section.

Appendix

An appendix, if needed, should appear after the acknowledgments. Use the 'starred' version of the `\section` commands to avoid section numbering.

References

[1] Sutton, K., "Air Radiation Revisited," in Nelson, H. F., ed., "Thermal Design of Aeroassisted Orbital Transfer Vehicles," AIAA, New York, Vol. 96, pp. 419–441, 1985.

[2] Miner, E. W. and Lewis, C. H., "Hypersonic Ionizing Air Viscous Shock-Layer Flows over Nonanalytic Blunt Bodies," NASA CR–2250, 1975.

[3] Wirin, W. B., "Space Debris 1989," in "Proceedings of the Thirty-Second Colloquium on the Law of Outer Space," AIAA, Wahington, DC, 1990, pp. 184–196.

[4] Turner, M. J., Martin, H. C., and Leible, R. C., "Further Development and Applications of Stiffness Methods," in "Matrix Methods of Structural Analysis," Macmillian, New York, Vol. 1, pp. 203–266, 1st ed., 1964.

[5] Bhutta, B. A. and Lewis, C. H., "Large-Angle-of-Attack Viscous Hypersonic Flows over Complex Lifting Configurations," *Journal of Spacecraft and Rockets*, Vol. 27, No. 2, 1990, pp. 194–204. Also AIAA Paper 89–0269, Jan. 1989.

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[b]The conclusion section is the last section of the abstract that should be numbered. Acknowledgments, appendix (if present), and references should be listed without numbers.

[6] Blottner, F. G., "Prediction of Electron Density in the Boundary Layer of Entry Vehicles with Ablation," in "The Entry Plasma Sheath and Its Effects," Vol. 1, pp. 219–240, 1970.

[7] Bhutta, B. A. and Lewis, C. H., "PNS Predictions of External/Internal Hypersonic Flows for NASP Propulsion Applications," Vra–tr–90–01, VRA, Inc., Blacksburg, VA, 1990.

[8] Bhutta, B. A. and Lewis, C. H., "Aerothermodynamic Performance of 3-D and Bent-Nose RVs Hypersonic Conditions," AIAA Paper 90–3068, 1990.

[9] Anon., "Equations, Tables, and Charts for Compressible Flow," NACA Rept. 1135, 1953.

[10] Moss, J. N., private communication, NASA Langley Research Center, Hampton, VA, 1990.

[11] Tufte, E. R., *The Visual Display of Quantitative Information*, Graphics Press, Cheshire, CT, 1983.

[12] Thoman, D. C., *Numerical Solutions of Time Dependent Two Dimensional Flow of a Viscous, Incompressible Fluid Over Stationary and Rotating Cylinders*, Ph.D. thesis, University of Notre Dame, Indiana, 1966.