INSTRUCTIONS FOR PRODUCING A CAMERA-READY MANUSCRIPT USING LATEX FOR PUBLICATION IN CONFERENCE PROCEEDINGS*

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This is where the abstract should be placed. It should consist of one paragraph giving a concise summary of the material in the article below. Replace the title, authors, and addresses within the curly brackets with your own title, authors, and addresses. You may have as many authors and addresses as you like. It is preferable not to use footnotes in the abstract or the title; the acknowledgments for funding bodies etc. are to be placed in a separate section at the end of the text. Please see the appendices too.

1. Guidelines

1.1. *Producing the Hard Copy*

The hard copy may be printed using the advice given in the file *procs-readme_2e.txt*, which is repeated in this section. Total there are five files given.

(1) *procs-readme10x7_2e.txt* — the preliminary guide.
(2) *procs-fig1.eps* — the figure/image file.
(3) *ws-procs10x7.cls* — the class file that provides the higher level latex commands for the proceedings. Don't change these parameters.
(4) *ws-procs10x7.tex* — the main text.
(5) *ws-procs10x7.pdf* — sample pages of the above text.

You can delete our sample text and replace it with your own contribution to the volume, however we recommend that you keep an initial version of the file for reference. Strip off any mail headers and then latex the tex file. The command for latexing is latex ws-procs10x7, do this twice to sort out the cross-referencing.

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If you wish to use some other form of word-processor, some guidelines are given in Sec. 1.2 below. These files will work with standard latex2e. If there is an abbreviation defined in the new definitions at the top of the file *ws-procs10x7.tex* that conflicts with one of your own macros, then delete the appropriate command and revert to longhand. Failing that, please consult your local texpert to check for other conflicting macros that may be unique to your computer system. Page numbers are included at the top of the page for your guidance. Do not worry about the final pagination of the volume which will be done after you submit the paper.

1.2. *Using Other Word-Processing Packages*

If you want to use some other form of word-processor to construct your output, and you are using the final hard copy version of these files as guidelines; then please follow the style given here:-

(i) The title will be in 10 pt boldface and in uppercase; the leading or \baselineskip is on 13 pt.
(ii) The authors' names will be in 9 pt roman and in uppercase.
(iii) The addresses will be in 9 pt and \baselineskip is on 11 pt.
(iv) The abstract text will be in 8 pt and \baselineskip is on 10 pt. It should be indented on both sides by 0.25 inch from the main body of the text.
(v) All three section heads are in 10 pt:-
1st section heading is in boldface number run on to boldface title and to set in uppercase and lowercase.
2nd section heading is in boldface number run on to bold-italic title and to set in uppercase and lowercase.
3rd section heading is roman number run on to italic title and to set in initial cap only.
(vi) Figure captions is to set in 8 pt and \baselineskip is on 10 pt.
(vii) Table caption, table column heads and table body text is to set in 8 pt and \baselineskip is on 10 pt.
(viii) Footnote text and reference text is to set in 8 pt.

The book trim size will be 10 by 7 inches; however you should submit your ms copy on standard A4 paper. The text area excluding page numbers should be 8 by 5.5 inches. Paragraphs should have a first line indented by about 0.25 inch except where the paragraph is preceded by a heading. It is also important to reproduce the spacing of the text and headings as shown here. Text should be slightly more than single-spaced; use a baselineskip (which is the average distance from the base of one line of text to the base of an adjacent line) of 13 pt and 10 pt for footnotes, table captions and figure captions.

1.3. *Headings, Text and Equations*

Please preserve the style of the headings, text font and line spacing in order to provide a uniform style for the proceedings volume.

Equations should be centered and numbered consecutively, as in Eq. (1), and the *eqnarray* environment may be used to split equations into several lines, for example in Eq. (2), or to

align several equations. An alternative method is given in Eq. (3) for long sets of equations where only one referencing equation number is wanted.

In latex, it is simplest to give the equation a label, as in Eq. (1) where we have used *label*{*eq:murn*} to identify the equation. You can then use the reference *ref*{*eq:murn*} when citing the equation in the text which will avoid the need to manually renumber equations due to later changes. (Look at the source file for some examples of this.)

The same method can be used for referring to sections and subsections.

1.4. *Tables*

The tables are designed to have a uniform style throughout the paper. It does not matter how you choose to place the inner lines of the table, but we would prefer the border lines to be of the style shown in Table 1. The top and bottom horizontal lines should be single (using *hline*), and there should be single vertical lines on the perimeter, (using *begin*{*tabular*}{|...|}). For the inner lines of the table, it looks better if they are kept to a minimum. We've chosen a more complicated example purely as an illustration of what is possible.

The caption heading for a table should be placed at the top of the table.

Table 1. First five normalized natural frequencies of a clamped clamped beam with internal hinge at 4 different locations.

	$A = 0.56$	$B = 0.69$	$C = 0.75$	$D = 0.100$
AB_1	14.0640	18.5620	22.0817	18.90732
AC_2	61.6728	44.7844	44.5884	60.17496
AD_3	88.1380	118.1564	101.2240	120.72693
DB_4	199.8594	173.1269	194.4907	188.75258
DA_5	246.7889	255.9483	284.6633	262.24264

1.5. *Figures/Illustrations/Images*

Authors are advised to prepare their figures in black and white. Please prepare the figures in high resolution (300 dpi) for half-tone illustrations or images. Half-tone pictures must be sharp enough for reproduction, otherwise they will be rejected.

Colour images are allowed only when they are stated in the publishing agreement. The colour images must be prepared in CMYK (Cyan, Magenta, Yellow and Black). RGB colour images are not acceptable for colour separation.

It is best to embed the figures in the text where they are first cited, e.g. see Figure 1. Please ensure that all labels in the figures are legible irregardless of whether they are drawn electronically or manually.

If you wish to 'embed' a postscript figure in the file, then remove the % mark from the declaration of the postscript figure *epsfbox* within the figure description and change the filename to an appropriate one. Also remove the comment % mark from the *epsfxsize* command and specify the required width of the figure. System will automatically enlarge

or reduce the figure based on the *x-size* provided with *epsfxsize* command. You may need to play around with this as different computer systems appear to use different commands. If you like to have an empty box size to the image you can just fill in the *x, y size* against the command *figurebox*, which has three arguments. The third argument is for actual figure name.

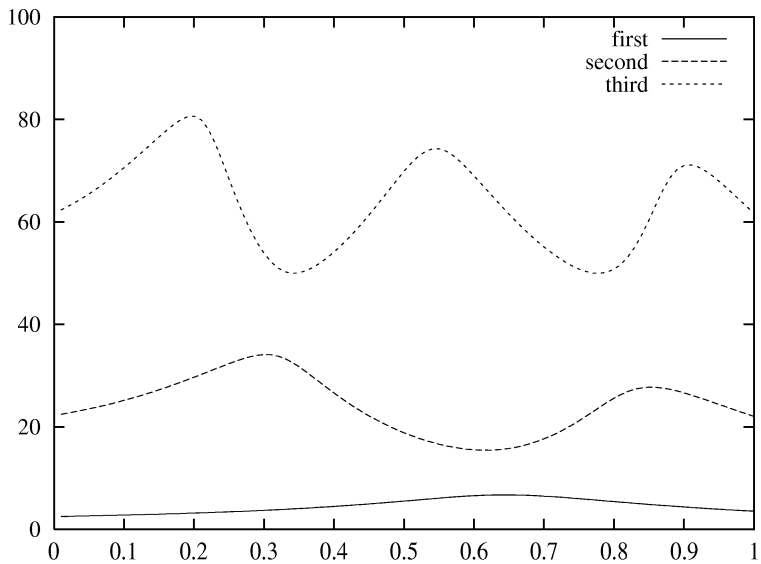

Figure 1. First 3 normalized frequencies versus release location for clamped simply supported beam with internal slide release.

Next adjust the scaling of the figure until it is correctly positioned, and remove the declarations of the lines and any anomalous spacing.

If you prefer to submit glossy prints of figures, then it is very important to leave sufficient blank spaces in your manuscript to accommodate your figures. Send the hard copy of the figures on separate pages with clear instructions on where to match them to the repsective blank spaces in the final hard copy text. Please ensure that each figure is correctly scaled (ensure legibility) to fit the space available.

The caption heading for a figure should be placed below that figure.

1.6. *Limitations on the Placement of Tables, Equations and Figures*

Very large figures and tables should be placed on a page by themselves. One can use the instruction *begin*{*figure*}[*h*] or *begin*{*table*}[*h*] to position these, and they will appear on a separate page devoted to figures and tables. We would recommend making any necessary adjustments to the layout of the figures and tables only in the final draft. It is also simplest to sort out line and page breaks in the last stages.

1.7. *Acknowledgments, Appendices and the Bibliography*

If you wish to acknowledge funding bodies etc., the acknowledgments may be placed in a separate section at the end of the text, before the Appendices. This should not be numbered so use *section**{*Acknowledgments*}.

It is preferable not to have Appendices in a brief article, but if more than one Appendix is necessary then set headings as Appendix A, Appendix B, etc. It is to type as *section**{*Appendix A*}.

1.7.1. *Footnotes and the citation*

Footnotes are denoted by a character superscript in the text,[a] and references are denoted by a number superscript. We have used *bibitem* to produce the bibliography. Citations in the text use the labels defined in the bibitem declaration, for example, the first paper by Jarlskog[1] is cited using the command *cite*{*ja*}.

If you use square brackets for citation e.g. [2] please note that the citation should appear before the punctuation mark, e.g. [2], in the body text.

1.8. *Final Manuscript*

The final hard copy that you submit must be absolutely clean and unfolded. It will be printed directly without any further editing. Use a printer that has a good resolution printout (600 dpi or higher). There should not be any corrections on the printed pages, nor should adhesive tape cover any lettering. Photocopies are not acceptable.

Your manuscript will not be reduced or enlarged when filmed so please ensure that indices and other small pieces of text are legible.

2. Sample Mathematical Text

The following may be (and has been) described as 'dangerously irrelevant' physics. The Lorentz-invariant phase space integral for a general n-body decay from a particle with momentum P and mass M is given by:

$$I[(P-k_i)^2, m_i^2, M] = \frac{1}{(2\pi)^5} \int \frac{d^3k_i}{2\omega_i} + R \underset{A}{\rightarrow} X + \delta^4(P-k_i)\,. \tag{1}$$

The only experiment on $K^{\pm} \rightarrow \pi^{\pm}\pi^0\gamma$ since 1976 is that of Bolotov *et al.*[4] There are two necessary conditions required for any acceptable parametrization of the quark mixing matrix. The first is that the matrix must be unitary, and the second is that it should contain a CP violating phase δ. In Sec. 1.2 the connection between invariants (of form similar to J) and unitarity relations will be examined further for the more general $n \times n$ case. The reason is that such a matrix is not a faithful representation of the group, i.e. it does not cover all

[a] Just like this one.

of the parameter space available

$$\begin{aligned} T = &\operatorname{Im}[V_{11}V_{12}{}^*V_{21}{}^*V_{22}] \\ &+ \operatorname{Im}[V_{12}V_{13}{}^*V_{22}{}^*V_{23}] \\ &- \operatorname{Im}[V_{33}V_{31}{}^*V_{13}{}^*V_{11}]\,, \end{aligned} \tag{2}$$

where $k = j$ or $j+1$ and $\beta = \alpha$ or $\alpha+1$, but if $k = j+1$, then $\beta \neq \alpha+1$ and similarly, if $\beta = \alpha+1$ then $k \neq j+1$.[b] There are only 162 quark mixing matrices using these parameters which are to first order in the phase variable $e^{i\delta}$ as is the case for the Jarlskog parametrizations, and for which J is not identically zero. It should be noted that these are physically identical and form just one true parametrization

$$\begin{aligned} \mathbf{K} = &\operatorname{Im}[V_{j,\alpha}V_{j,\alpha+1}{}^*V_{j+1,\alpha}{}^*V_{j+1,\alpha+1}] \\ &+ \operatorname{Im}[V_{k,\alpha+2}V_{k,\alpha+3}{}^*V_{k+1,\alpha+2}{}^*V_{k+1,\alpha+3}] \\ &+ \operatorname{Im}[V_{j+2,\beta}V_{j+2,\beta+1}{}^*V_{j+3,\beta}{}^*V_{j+3,\beta+1}] \\ &+ \operatorname{Im}[V_{k+2,\beta+2}V_{k+2,\beta+3}{}^*V_{k+3,\beta+2}{}^*V_{k+3,\beta+3}] \\ \mathbf{M} = &\operatorname{Im}[V_{j,\alpha}{}^*V_{j,\alpha+1}V_{j+1,\alpha}V_{j+1,\alpha+1}{}^*] \\ &+ \operatorname{Im}[V_{k,\alpha+2}V_{k,\alpha+3}{}^*V_{k+1,\alpha+2}{}^*V_{k+1,\alpha+3}] \\ &+ \operatorname{Im}[V_{k+2,\beta+2}V_{k+2,\beta+3}{}^*V_{k+3,\beta+2}{}^*V_{k+3,\beta+3}]\,. \end{aligned} \tag{3}$$

For this point $s \in S$, $\mathcal{X}_s$ satisfies all conditions (a), (b) and (c). So, if the Theorem 2.1 holds for $\mathcal{X}_s$, then we can find a point $s' \in S_1^0 \cap V$ where $\mathcal{X}_{s'}$ is projective. Since numerical equivalence and homological equivalence coincide on Y.

Theorem 2.1. *Let V be a closed complex analytic subvariety of a complex hyperbolic space form of finite volume. Then the Gauss mapping for V is non-degenerate unless V is totally geodesic.*

Let V be a k-dimensional complex submanifold of $\mathbb{P}^n$ and $\gamma : V \to \mathbb{G}(k,n)$ be the Gauss mapping. At a point $x \in V$, Lemma 2.1 let $\hat{T}_x(V)$ be the $(k+1)$-dimensional affine tangent space of V at x so that the tangent space of V.

Lemma 2.1. *There exists a point $(a;b) \in \Delta^m \times \mathbb{C}^l$ and an open neighborhood W of $(a;b)$ such that $F(a;b) \in \partial\mathbb{B}^n$. A closed complex analytic subvariety of a complex torus has degenerate Gauss mapping if and only if it is invariant under the translation by a complex subtorus.*

Let F be a symmetric and reflexive Borel relation on the standard Borel space X. F is *locally finite* if for all $x \in X, F(x) = \{y \in X : yFx\}$ is finite.

Acknowledgments

This is where one acknowledge funding bodies etc. Note that section numbers are not required for Acknowledgments, Appendix or References.

[b]An example of a matrix which has elements containing the phase variable $e^{i\delta}$ to second order, i.e. elements with a phase variable $e^{2i\delta}$ is given at the end of this section.

Appendix A. First Appendix

Appendices should be used only when absolutely necessary. They should come before the References. If there is more than one appendix, number them alphabetically. Number displayed equations occurring in the Appendix in this way, e.g. (A.1), (A.2), etc.

$$\mu(n,t) = \frac{\sum_{i=1}^{\infty} 1(d_i < t, N(d_i) = n)}{\int_{\sigma=0}^{t} 1(N(\sigma) = n) d\sigma} \,. \tag{A.1}$$

Appendix B. Second Appendix

References in the text are to be numbered consecutively in Arabic numerals, in the order of first appearance. They are to be typed in superscripts after punctuation marks, e.g.

(1) "... in the statement.[6]"

(2) "... have proven[6] that this equation ..."

This is done using the command: "\cite{name}".

When the reference forms part of the sentence it should not be superscripts, e.g.

(1) "One can deduce from Ref. 2 that ..."

(2) "See Refs. 1–3, 4 and 6 for more details."

(3) "We refer the readers to Ref. 6."

This is done using the command: "Ref.~\refcite{name}".

(Alternatively you may opt to use the default square bracket [ ] citation throughout.)

Appendix C. Footnotes

Footnotes should be numbered sequentially in superscript lowercase roman letters.[c]

Appendix D. Standard Abbreviations

(a) Do not abbreviate the first word of any sentence:
"Figure 2 shows us ...."

(b) Some abbreviation:
' figure ' = ' Fig. '
' figures ' = ' Figs. '
' equation ' = ' Eq. '
' equations ' = ' Eqs. '
' Section 5 ' = ' Sec. 5 '
' Sections 5 and 6 ' = ' Secs. 5 and 6 '
' for example ' = ' e.g. '
Note that the first letter is capitalized. There is also a dot.

(c) When it is not appropriate, DO NOT abbreviate. Hence the word 'Table' is not abbreviated. We also do not write 'Eq. of motion'.

(d) Depends on authors' preference, sometimes ' Eq. ' and ' Eqs. ' are not used at all because it is understood that it is an equation. For example,

[c]Footnotes should be typeset in 8 pt Times roman at the bottom of the page.

We can see a summation and an integration in (A.1).

Appendix E. Single Quotation and Double Quotations

Use double quotation when possible so that there are fewer mix-ups with differentiation and 'prime'. For quotation within a quotation you may use the single-quotation.

Open-quotation ‘ is located at the top left-hand corner of the keyboard. Close-quotation ’ is near the ENTER-key of the keyboard.

References

1. M. Barranco and J. R. Buchler, *Phys. Rev.* **C34**, 1729 (1980).
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3. H. Müller and B. D. Serot, *Phys. Rev.* **C52**, 2072 (1995).
4. V. Baran, M. Colonna, M. Di Toro and A. B. Larionov, *Nucl. Phys.* **A632**, 287 (1998).
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6. X. Yan, *Phys. Rev.* **E61**, 4745 (2000).