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# THE TITLE OF THE PAPER IN CAPITAL LETTERS WITH FORCED LINEBREAK

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Include an abstract, a concise summary of the work covered at length in the main body of the article. It is used for secondary publications and for information retrieval purposes.

Keywords: up to five keywords, more general terms and less specifics

#### 1. First-level heading, Line break was forced with \\

This sample document demonstrates proper use of LATEX in manuscripts prepared for submission to HJIC using the hjic.cls class. Line breaks in section headings at all levels can be introduced using N. A blank input line tells TEX that the paragraph has ended.

#### 1.1 Second-level heading: Formatting

Journal pages are published in the two-column format. The widetext environment will make the text the width of the full page, as on page 2. The widetext.sty file is provided in the HJIC-LaTeX-template.tar.gz package.

#### 1.2 Second-level heading: Reference citation

Citations in text refer to entries in the Bibliography; they use the commands  $\cite{\#1}$ . The argument of  $\cite$  is a comma-separated list of *keys*; a key may consist of letters and numerals. For example,  $\cite{article1}, article2$  produces [1,2].

HJIC uses numerical citations in the order of appearance in the text.

A reference within the bibliography is specified with a  $bibitem{\#1}$  command, where the argument is the citation key mentioned above. Using BibTeX is strongly recommended. In this case, references are included in a separate file; in this template, in the sample.bib file. The article [1, 2], book [3], inbook [4], and inproceeding [5] entries are the usual ones. The commands

\bibliographystyle{hjic}
\bibliography{sample}

at the end of the manuscript will do the job. The hjic.bst file takes care of HJIC reference style automatically. If not using  $BibT_EX$ , the thebibiliography environment should be used instead.

#### 2. First-level heading, math and equations

Inline math may be typeset using the \$ delimiters. Bold math symbols may be achieved using the bm package and the  $bm{\#1}$  command it supplies. For instance, a bold  $\alpha$  can be typeset as  $bm{\lambdaalpha}$  giving  $\alpha$ . Displayed math will center by default.

All equations must be inserted in an editable format. Please do not insert them as images.

When the  $\label{\#1}$  command is used [cf. input for Eq. (1)], the equation can be referred to in text without knowing the equation number that T<sub>E</sub>X will assign to it. Just use  $\ref{\#1}$ , where #1 is the same name that used in the  $\label{\#1}$  command. Unnumbered single-line equations can be typeset using the  $\[, \]$  format.

Examples for one-line and two-line equations that fit in a column:

$$\phi(x) = -\frac{e}{\epsilon\epsilon_0} \sum_i z_i \rho_i \int_x^\infty (t-x) h_i(t) dt.$$
(1)

and

$$u_{ij}(r) = \begin{cases} \infty & \text{for } r < d \\ \frac{z_i z_j e^2}{4\pi\epsilon_0 \epsilon r} & \text{for } r \ge d \end{cases}, \quad (2)$$

Not all numbered equations will fit within a narrow column this way. The equation number will move down

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automatically if it cannot fit on the same line with a oneline equation. For example,

# $\{biuh7gh9ujhiugh78ghzgzgbuz\alpha\beta\gamma\delta jrg\alpha\beta ui675v\}.$ (3)

If the equation does not fit the column even in this way, it can be broken into two lines (**recommended**). Multiline equations are obtained by using the eqnarray environment. Use the \nonumber command at the end of each line to avoid assigning a number

$$\beta z e \phi(x)/2 = \ln \left\{ 1 + \frac{b/2}{1 + \sqrt{1 + b^2/4}} \exp[-\kappa y] \right\}$$
$$- \ln \left\{ 1 - \frac{b/2}{1 + \sqrt{1 + b^2/4}} \exp[-\kappa y] \right\}, \quad (4)$$

Do not use \label{#1} on a line of a multiline equation if \nonumber is also used on that line. Incorrect cross-referencing will result.

If one wants to use Roman font within a math environment, use #1 or  $\mathrm{\#1}$  Use  $\mathbf{\#1}$  to get bold fonts in a math environment, for example, to indicate vectors. If the subscript or superscript contains the abbreviation of an actual text with a meaning, for example,  $C_{dl}$ , where "dl" stands for "double layer", the subscript "dl" must be typeset in Roman:  $C_{\rm l} \mathrm{dl} \}$ .

#### 2.1 Wide equations

It is possible to set an equation in a wide format when it spans across the full page, for example:

$$\beta ze\phi(x)/2 = \ln\left\{1 + \frac{b/2}{1 + \sqrt{1 + b^2/4}} \exp[-\kappa y]\right\} - \ln\left\{1 - \frac{b/2}{1 + \sqrt{1 + b^2/4}} \exp[-\kappa y]\right\},\tag{5}$$

Table 1: This is a narrow table which fits into a text column when using twocolumn formatting.

Left	Centered	Right
1	2	3
10	20	30
100	200	300

This style is recommended only if the equation is so long that it cannot be easily broken into four lines or less.

#### 3. Cross-referencing

LaTEX will automatically number sections, equations, figure captions, and tables. In order to reference them in text, use the  $\label{\#1}$  and  $\ref{\#1}$  commands. To reference a particular page, use the  $\pageref{\#1}$  command.

The  $\label{\#1}$  should appear in a section heading, within an equation, or in a table or figure caption. The  $\ref{\#1}$  command is used in the text where the citation is to be displayed. Some examples: Section 1 on page 1, Table 1, and Fig. 1.

#### 4. Floats: figures and tables

Figures and tables are typically "floats"; LATEX determines their final position via placement rules. LATEX isn't always successful in automatically placing floats where you wish them. You might need some experimenting to put the figures where you want.

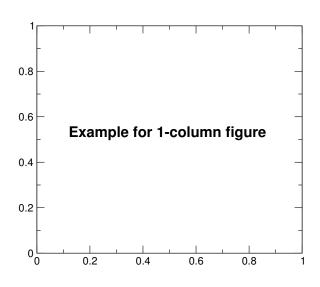


Figure 1: Figures can be fit into a single column.

Figures are included in the figure environment, the content of which imports the image (\includegraphics) followed by the figure caption (\caption). The argument of the latter command should itself contain a \label command if you wish to refer to your figure with \ref.

Import your image using either the graphics or graphix packages. These packages both define the \includegraphics{#1} command, but they differ in the optional arguments for specifying the orientation, scaling, and translation of the figure. Fig. 1 is small enough to fit in a single column, while Fig. 2 is too wide for a single column, so instead the figure\* environment has been used.

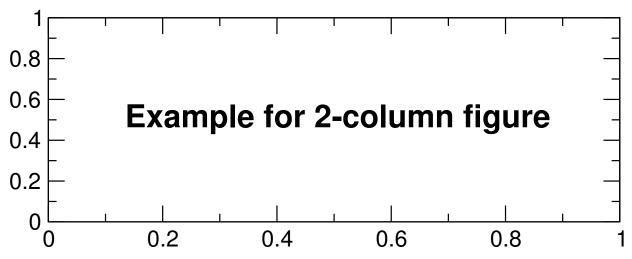


Figure 2: Use the figure \* environment to get a wide figure, spanning the page in twocolumn formatting. Here an eps (encapsulated postscript) file has been included.

Please, avoid including bitmap pictures (jpg, png, tif, etc.) unless it is absolutely necessary. We prefer scalable formats (such as eps, pdf) that can be produced by most intelligent plotting softwares. Using pdflatex to compile is highly recommended, because it produces a pdf output directly and usually works better. Also, bitmap figures can be included if necessary. Encapsulated postscript (eps) figures can also be included using pdflatex. In this case, the eps files are first converted into pdf files.

Tables are included in the table environment. The \caption command should be typed first within the table before tabular.

The heart of any table is the tabular environment, which represents the table content as a (vertical) sequence of table rows, each containing a (horizontal) sequence of table cells. Cells are separated by the & character; the row terminates with  $\backslash \backslash$ . The required argument for the tabular environment specifies how data are displayed in each of the columns. For instance, a column may be centered (c), left-justified (1), right-justified (r), or aligned on a decimal point (d). Horizontal rules are typeset using the  $\hline$  command.

Rows whose columns span multicolumns can typeset LATEX's ple be using \multicolumn{#1}{#2}{#3} command (for example, see the first row of Table 2).

Tables that fit in a narrow column are contained in a table environment. Table 2 is a wide table, therefore set with the table\* environment. Lengthy tables may need to break across pages. Using the LATEX  $2_{\varepsilon}$  package longtable is recommended.

#### Acknowledgement

Acknowledgment is the place where you can be grateful. Insert acknowledgments to funding agencies and colleagues here.

### A. Appendix: title of the 1st appendix

To start the appendixes, use the \appendix command. Thereafter normal section commands are used.

\appendix \section{Background}

will produce an appendix heading that says "APPENDIX A: BACKGROUND" (note that the colon is set automatically).

If there is only one appendix, then the letter "A" should not appear. This is suppressed by using the star version of the appendix command ( $\appendix*$  in the place of  $\appendix$ ).

#### Appendix: there can be more appendices

Here comes the text of the 2nd Appendix. With  $\section*{}$ , you can avoid automatic numbering with capital letters.

Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Etiam lobortis facilisis sem. Nullam nec mi et neque pharetra sollicitudin. Praesent imperdiet mi nec ante. Donec ullamcorper, felis non sodales commodo, lectus velit ultrices augue, a dignissim nibh lectus placerat pede. Vivamus nunc nunc, molestie ut, ultricies vel, semper in, velit. Ut porttitor. Praesent in sapien. Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Duis fringilla tristique neque. Sed interdum libero ut metus. Pellentesque placerat. Nam rutrum augue a leo. Morbi sed elit sit amet ante lobortis sollicitudin. Praesent blandit blandit mauris. Praesent lectus tellus, aliquet aliquam, luctus a, egestas a, turpis. Mauris lacinia lorem sit amet ipsum. Nunc quis urna dictum turpis accumsan semper.

	Double-column1 spanning columns 2-3		Double-column2 spanning columns 4-5	
Col1	Col2	Col3	Col4	Col5
Row1	$A_{11}$	$A_{12}$	$A_{13}$	$A_{14}$
Row2	$A_{21}$	$A_{22}$	$A_{23}$	$A_{24}$
Row3	$A_{31}$	$A_{32}$	$A_{33}$	$A_{34}$
Row4	$A_{41}$	$A_{42}$	$A_{43}$	$A_{44}^{*}$

Table 2: Wide tables that span the page width in twocolumn are formatted using the table\* environment. It also demonstrates the use of \multicolumn in rows with entries that span more than one column.

## REFERENCES

- Chapman, D.L.: LI. A contribution to the theory of electrocapillarity, *Phil. Mag. Ser.* 6, 1913 25(148), 475–481
- [2] Henderson, D., Abraham, F.F., Barker, J.A.: The Ornstein-Zernike equation for a fluid in contact with a surface, *Mol. Phys.*, 1976 **31**(4), 1291–1295
- [3] Jackson, J.D.: Classical Electrodynamics (Wiley, New York), 3rd edn., 1999
- [4] Eisenberg, R.S.: New developments and theoretical studies of proteins, chap. Atomic biology, electrostatics, and ionic channels (World Scientific, Philadelphia), 1996 269–357
- [5] Boda, D.: Double Layers are Everywhere, in Workshop "Nanostructures in biology and physics", July 21-25 (Wolfgang Pauli Institute, Vienna, Austria)