

# Sample manuscript for proceedings of LT23

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## Abstract

This is a sample manuscript for the proceedings of LT23. We give examples of several  $\LaTeX$  constructions that can be used in the manuscripts. You can use this file or the shorter `LTpap.tex` as a template when you write your own manuscript.

*Key words:* Josephson effect; flux lines;  $\text{YBa}_2\text{Cu}_3\text{O}_7$ ; specific heat

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## 1. Introduction

This is a sample manuscript for the proceedings of the 23rd International Conference on Low Temperature Physics (Hiroshima, Japan, August 20-27, 2002).

The advantage of using `phbauth.cls` rather than some other  $\LaTeX$  style is that in typesetting it produces an output that approximates the final printed version in Physica B, C, and E. Thus typesetting with this class file is an easy way to see how long your paper will be. The maximum length of a contributed paper is two pages. Make sure that you do not submit a manuscript that is too long.

To use `phbauth.cls` you need to have the current version of  $\LaTeX$ ,  $\LaTeX 2\epsilon$ . If you still have the old  $\LaTeX 2.09$ , you should definitely upgrade, since

that version is nowadays considered obsolete. In addition, you need `elsart.cls`, the standard Elsevier article style. This, and other files are available from <http://www.issp.u-tokyo.ac.jp/lt23/>. In this directory, you'll find:

- `elsevier.dvi`, general instructions for manuscript preparation from Elsevier Science.
- `phbauth.cls`, the main class file for LT23 manuscripts.
- `elsart.cls`, secondary class file used by `phbauth.cls`
- `LTpap.tex`, an empty template for your manuscript.
- `LTsamplepap.tex`, this file, a demonstration of the LT23 manuscript format.
- `figure1.eps`, a demonstration figure that should appear as Fig. 1 of this sample manuscript.

You must use encapsulated postscript (eps) for figures. Please take care that your figure files are not unnecessarily large, i.e., remove data that will not be visible within the resolution. The figure

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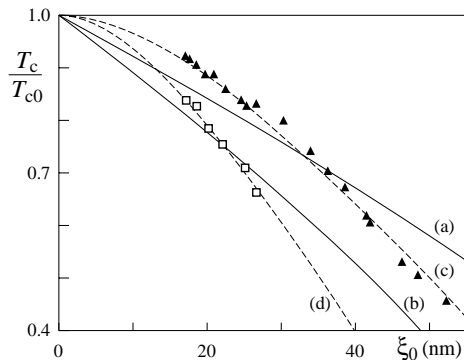


Fig. 1. The size of the figure can be adjusted by changing the width number. Take care that the smallest characters in the figure are not much smaller than in this figure caption.

files can simply be included with commands in this  $\LaTeX$  file.

In case you are not yet familiar with including figures into  $\LaTeX$ , we have provided an example picture. Save it with the name ‘`figure1.eps`’ into the same directory as this file. Then run  $\LaTeX$  to generate the dvi file. Depending on your dvi previewer software (and other circumstances), the figure is or is not visible (as Fig. 1) on your computer screen, but in both cases it should come out right when you print the typesetted document on paper. An error message is produced during typesetting if the the program cannot find the file of the figure.

We note that typesetting of  $\LaTeX$  is not used when the proceedings are produced at Elsevier. Instead, the  $\LaTeX$  files are translated into SGML before printing. Therefore, the  $\LaTeX$  typesetted manuscript is not exactly the same as will be printed in Physica B. Primitive  $\TeX$  formatting commands are neglected in translation to SGML. Therefore, there is no point to modify the  $\LaTeX$  style, for example, to fit more text on one page: Such changes only abolish the possibility to see the length but do not affect the final printout in Physica B.

## 2. Some typical $\LaTeX$ constructions

Using  $\LaTeX$  one can make references [1], use *emphasis*, greek letters  $\alpha$ , bold face symbols **a**,  $\phi$ , equations

$$\tau_0 \frac{\partial \Delta}{\partial t} = -\alpha \Delta - \beta |\Delta|^2 \Delta + K \frac{\partial^2 \Delta}{\partial x^2}. \quad (1)$$

We can refer to an equation (1). It is recommended to use  $\langle a \rangle$  instead of  $< a >$ ,  $E_{\text{low}}$  instead of  $E_{low}$ ,  $T_c$  instead of  $T_c$ ,  $\cos x$  instead of  $\cos x$ ,  $e^x$  instead of  $e^x$ ,  $\int dx$  instead of  $\int dx$  and  $i$  instead of  $i$  for the imaginary unit. And equations with more than one line:

$$\begin{aligned} x &= 17y \\ &+ 3z. \end{aligned} \quad (2)$$

We wish you successful writing.

## Acknowledgements

We thank our boss for the opportunity to work for LT23.

## References

- [1] N.N. Author, Phys. Rev. B **xx**, xxxx (1991).