

Author's Guide

International Conference

“Physics and Control” (PhysCon 2003)

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Abstract

This document provides instructions for preparing a paper for Proceedings of the International Conference “Physics and Control” (PhysCon 2003). Conference proceedings on CD-ROM and program volume will be distributed among the participants at the Registration Desk. Additionally, hard copy of the proceedings (four volumes are planned) can be ordered (see registration form). These volumes will also be distributed by IEEE CSS.

Our guidelines basically follow those adopted for IEEE CDC publications. In particular, we used the instructions written for IEEE Conferences on Decision and Control held in 1999–2002. This document describes the preparation of a conference paper.

1 Paper Submission

Authors submit their papers to the Organizing Committee in an electronic form. Please follow carefully the submission process described on the conference site <http://www.physcon.ru>. The deadline for receipt of your contribution is **May 15, 2003**. Papers received after the deadline, may not be included in the proceedings. Hardcopies are not required. Please, apply exclusively the process pointed above, and do not send your manuscripts to the members of Program or Organizing Committees by e-mail.

2 General Specifications

2.1 Important Information

1. You need to submit you manuscript as PDF or Postscript file (PDF format is preferable). Please avoid nonstandard fonts that may cause

reading or conversion problems. Postscript Type 1 fonts are desirable. Any other file formats (Microsoft Word, L^AT_EX, etc) are not acceptable. For more details please see the section “Technical information.” The size of the file preferably should not exceed 1.5 Mb. (This may be achieved by avoiding complicated high-resolution figures.) Please zip your file if its size exceeds 500 Kb.

2. When producing you PDF file please set A4 (210 mm by 297 mm) paper size and 600 dpi resolution. All the descriptions of nonstandard fonts should be embedded as subsets into your document. Do not generate your PDF file as image (without fonts recognition). (See the section “Technical information.”)
3. Those participants who will give a Plenary or Invited Lecture can submit a full-size paper of twelve (12) pages, each Regular or Poster Lecture is allotted a paper of six (6) pages in the proceedings. Each manuscript must follow this rule. Authors with multiple submissions must apply these guidelines to each manuscript separately. Up to three additional pages will be permitted for a charge of 50 US Dollars/Euro for each additional page.
4. The title and authorship of your paper will appear in the final program, in the table of contents, and author index of the proceedings as they are shown in your manuscript submitted to the Organizing Committee.

2.2 Preparation of Papers

Your paper must be formatted in two columns. To ensure uniformity of appearance for the proceedings, the papers must conform to the following specifications. It is highly recommended to use L^AT_EX in preparing and formatting your manuscript.

The height of the text block must be **240 mm**. The width of each column must be **80 mm**. The distance between the two columns of text must be **5 mm**. Thus, the width of the text block is **165 mm**. The text must be centered left-to-right on the page, i.e., left and right margins should be the same. The distance from the bottom edge of the paper to the bottom of the last line of type on the page should be not less than **30 mm**. This allows room for the printer to insert the copyright notice on the first page and page numbers.

Please, do not insert page numbers or other information into running headers or footers. This will be done by us.

2.3 Required Font Sizes

For the main body of the text the **10** point size roman font should be used. Some technical formatting programs print mathematical formulas in italic type, with subscripts and superscripts in a slightly smaller font size. This is acceptable.

2.4 Title

The title should be centered across the top of the first page. The **18** point size bold font is recommended.

2.5 Authors' Names and Addresses

The authors' names and addresses must be centered below the title. The **12** point size roman font is recommended. Please, include your e-mail address. For multiauthored papers names and addresses can be placed either side by side, or one under another. Please do not put addresses in footnotes.

2.6 Paragraphs

Do not indent the initial lines of paragraphs. Leave a line clear between paragraphs.

2.7 References

References should be numbered consecutively throughout the paper and be listed at the end of the paper with the main heading **References**. When citing references in the text, type the corresponding number in square brackets [1]. References should be complete and in standard IEEE style. See the section **References** for examples of listing different kinds of publications [1]–[3].

2.8 Equations

Equations have to be numbered consecutively with the number in parenthesis, flush to the right. E.g., see the equation (1)

$$\sigma(t) = \sigma_0(t) - \int_0^T \gamma(t-s)u(s) ds. \quad (1)$$

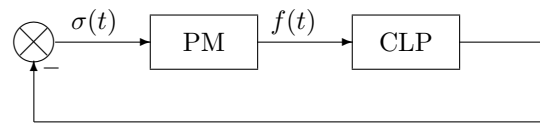


Figure 1: One-column sample picture

2.9 Theorems, Lemmas, Remarks, Definitions and so on

The body of a theorem, or a similar statement, can be typed either in roman, or in italic font. When using L^AT_EX employ the `\newtheorem` command. E.g.,

Lemma 1 *Body of the lemma. Body of the lemma. Body of the lemma. Body of the lemma. Body of the lemma. Body of the lemma. Body of the lemma. Body of the lemma. Body of the lemma.*

For proofs the following style is recommended:

Proof: Body of the proof. Body of the proof. Body of the proof. Body of the proof. Body of the proof. Body of the proof. Body of the proof. Body of the proof. ■

When using LaTeX, the **proof** environment, defined in the style file **physcon.sty** can be applied.

2.10 Illustrations

Please avoid halftone illustrations and photographs. The papers will be printed in black and white. Colored figures are acceptable for CD ROM publications, but please make sure that they are reproduced clearly in gray scale and the text does not refer to colors.

Figures should be inserted near their citation or at the end of the manuscript, after References. Large figures may extend over two columns if necessary. Make sure that you number and include a caption for each figure. See Fig. 1 and Fig. 2 for examples.

2.11 Tables

Table heading, including the number, is to be typed above the table. See, e.g.,

Table 1: Caption text

Title 1	Title 2	Title 3
Row 1, Col 1	Row 1, Col 2	Row 1, Col 3
Row 2, Col 1	Row 2, Col 2	Row 2, Col 3
Row 3, Col 1	Row 3, Col 2	Row 3, Col 3

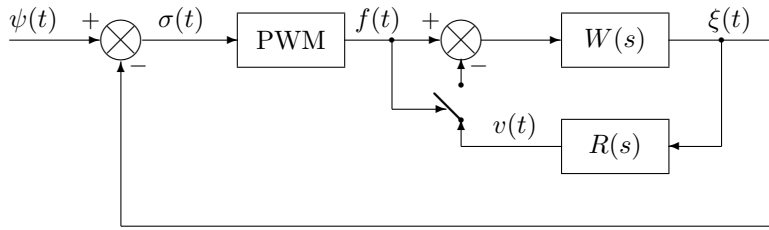


Figure 2: Two-columns sample picture

2.12 Footnotes

Please, do not use footnotes at all. Authors' addresses have to be placed after the authors' names below the title of the paper. Information about any financial support should be placed in the subsection **Acknowledgements** at the end of your paper.

2.13 Page Numbers, Session Number, Copyright Information and Conference Identifications

Please, do not number pages. All the information listed above will be inserted later by the proceedings printer.

3 Headings

Main headings are to be column centered in a bold font. They may be numbered, if so desired.

3.1 Subheadings

Subheadings should be in a bold font. They should start at the left-hand margin on a separate line.

3.1.1 Sub-subheadings: They are to be in a bold font, should be indented and run in at the beginning of the paragraph.

4 Hints for L^AT_EX Users

It is highly recommended that your paper be prepared using L^AT_EX document preparation system. We provide L^AT_EX 2_ε users with a class file **physcon.cls** and L^AT_EX 2.09 users with a style file **physcon.sty**. Both files are available from PhysCon home page <http://www.physcon.ru>. The L^AT_EX file, containing this instruction, is partly given in Appendix and can serve as a specimen.

5 Technical Information

5.1 How to Produce a Postscript File

A straightforward way to obtain a Postscript file from a file of any format is to print it with a Postscript driver. If you use a Postscript printer, you also have such driver installed. Otherwise, you may install a driver for a Postscript printer (e.g., for Apple Laser Writer) from standard distributives. Details depend on your platform, e.g., for Windows use Control Panel/Add Printer. Configure the driver to download all fonts (this may be automatic), and if available configure the driver for maximum postscript portability. Do not use internal printer fonts. Then print your file employing "Print to File" option.

The most common way is to produce a Postscript file from T_EX is using the dvips.exe utility (it is included in most of the modern T_EX distributions and also available from the website <http://www.radical-eye.com/dvips>). To obtain later better readable PDF fonts, users should apply this utility with the Ppdf option, e.g.:

```
dvips -Ppdf filename.dvi
```

5.2 Requirements to a PDF File

The conference CD ROM will contain a collection of files in the PDF file format. Such files can be viewed on screen or printed using the free software named Acrobat Reader, which is developed by Adobe Systems and has versions for the most popular platforms (Windows, Mac, and Unix).

Files with conference papers should be fully portable. It means that they should be properly viewed and printed at any computer in any country. It can be achieved by embedding fonts into PDF documents. You make check the fonts you used with the Acrobat Reader menus: **File/Document Info/Fonts**.

5.3 How to Produce a PDF File from Postscript

To convert a Postscript file to a PDF file you need a program called Adobe Acrobat Distiller, which is a part of Adobe Acrobat package. Unlike Acrobat Reader, this program is not free, so, if you do not have it, we will execute the conversion by ourselves.

A Postript file or a Microsoft Word file can serve as an input for this program.

Within Distiller's "Job Options" dialog (select using menu item `Distiller/Job Options`), configure the following:

On the "Font Embedding" tab turn ON the "Embed all fonts" control.

Turn ON the "Subset fonts below" control and type in the value 100 (i.e. any font below 100% usage will be stored in the Acrobat file as a subset of the original font.) This subset operation is necessary to protect the copyright of the font creator.

On the "Compression" tab, turn ON the "Compress Text and Line Art" control.

Turn OFF the "Downsample" control for color, grayscale and monochrome images. (Image size is permitted to be large when the document is stored on CDROM.)

Turn ON "Manual Compression" for color images and set to JPEG High.

Turn ON "Manual Compression" for grayscale images and set to JPEG High.

Turn ON "Manual Compression" for monochrome images and set to CCITT Group 4.

Important note. Another program that is commonly used for Postscript–PDF conversion is Acrobat Writer. However, this program does not properly embed fonts into a document. That is why we ask you *not to apply Acrobat Writer*.

5.4 How to Produce a PDF File from T_EX

There are several ways to produce a PDF document immediately from T_EX. (A comprehensive treatment of the problem can be found in Chapter 2 [1].) Here we describe two of them.

(i) You may use the `dvipdfm.exe` utility developed by M.A. Wicks. Its Windows version is included in the latest MiK_TE_X distributions <http://www.miktex.org> or T_EXLive package. Its LINUX version is available from the website

<http://gaspra.kettering.edu/dvipdfm>.

This utility produces excellent quality documents immediately from a dvi-file, it uses partial fonts embedding (i.e., embeds only those characters that are needed in the document). Some efforts are required when including images: only the images of JPG, PNG, and PDF formats are admissible, some special commands should be used for their inclusion. Please, take into account that `dvipdf` uses Letter paper format by default, so A4 format should be indicated explicitly in the command line, e.g.:

```
dvipdfm -p a4 filename.dvi.
```

(ii) The second way is to use PDF_TE_X; it is also contained in the last distributions of MiK_TE_X and T_EXLive. The PDF_TE_X programs produce pdf-files instead of dvi-files. You may just use `pdflatex.exe` program, e.g.:

```
pdflatex filename.tex.
```

6 IEEE Copyright Form

Complete the IEEE Copyright form available at our cite. No paper can be published without this completed form. The completed and signed form should be mailed to us to arrive by 15 May 2003.

7 Conclusions

Please make an extra effort to follow these guidelines as the quality of the publications depends on you. Thank you for your cooperation and contribution. We look forward to seeing you at our conference in St. Petersburg.

Acknowledgements

This subsection can be used to acknowledge any kind of support to your paper (e.g., you can mention your grants).

References

- [1] M. Goosens and S. Rahtz, *The L_AT_EX Web Companion*, Addison–Wesley, 1999. (A Russian translation is published by Mir, 2001.)
- [2] A.L. Fradkov, "Synthesis of an adaptive system of linear plant stabilization," *Avtomat. i Telemekh.*, no. 12, pp. 96–103, 1974 (Russian).
- [3] H. Nijmeijer, I.I. Blekhan, A.L. Fradkov, and A.Yu. Pogromsky, "Self-synchronization and controlled synchronization," *Proceedings of the 1st International Conference on Control of Oscillations*

and Chaos COC'97, St. Petersburg, Russia, August 27–29 1997, vol. 1, pp. 36–41.

Appendix

Here you find a shortened version of these instructions written in L^AT_EX.

```
% This text follows LaTeX-2e
% specifications. LaTeX 2.09 users
% have to replace its first line for
% \documentstyle{physcon}
%
\documentclass{physcon}
\begin{document}

\title{Author's Guide\
International Conference\
'Physics and Control'\
(PhysCon 2003)
}

\author{Alexander N. Churilov\
Department of Computer Science\
St. Petersburg Marine Technical
University\
3 Lotsmanskaya Str.,
190008 St. Petersburg, Russia\
churilov@nm.ru,
http://churilov.nm.ru}
\maketitle

\begin{abstract}
.....
\end{abstract}

\section{Manuscript Submission}

Authors submit their manuscripts to the
Organizing Committee.
.....

\section{General Specifications}
.....

\subsection{References} References should
be numbered consecutively throughout the
paper and be listed at the end of the paper
with the main heading {\bf References}.
When citing references in the text, type
the corresponding number in square brackets
\cite{1}. References should be
complete and in standard IEEE style.
See the section {\bf References} for
examples of listing different kinds of
```

```
publications \cite{1}--\cite{3}.
```

```
\subsection{Equations}
Equations have to be numbered consecutively
with the number in parenthesis, flush to
the right.
E.g., see the equation (\ref{E1})
\begin{equation} \label{E1}
\sigma(t)=\sigma_0(t)-\int_0^T
\gamma(t-s)u(s)\,ds.
\end{equation}
```

```
\subsection{Theorems, Lemmas, Remarks,
Definitions and so on}
The body of a theorem, or a similar
statement, can be typed either in roman, or
in italic font.
When using \LaTeX~employ
the \verb|\newtheorem| command. E.g.,
\begin{lemma}
Body of the lemma. Body of the lemma.
.....
\end{lemma}
```

For proofs the following style is recommended:

```
\begin{proof}
Body of the proof. Body of the proof.
.....
\end{proof}
.....
```

```
\subsection{Illustrations}
.....
```

Make sure that you number and include a caption for each figure. See Fig.~\ref{Fig1} and Fig.~\ref{Fig2} for examples.

```
\begin{figure}
\begin{center}
\begin{picture}(220,60)
.....
\end{picture}
\end{center}
\caption{One-column sample
picture}\label{Fig1}
\end{figure}
\begin{figure*}
\begin{center}
\begin{picture}(300,100)
.....
\end{picture}
\end{center}
\caption{Two-columns sample
picture}\label{Fig2}
```

`\end{figure*}`

`\subsection{Tables}`

Table heading, including the number, is to be typed above the table. See, e.g.,

`\begin{table}[htb]`

`\begin{center}`

`\caption{Caption text}`

`\begin{tabular}{lll}\hline`

Title 1 & Title 2 & Title 3\\ \hline

Row1, Col1 & Row1, Col2 & Row1, Col3\\

Row2, Col1 & Row2, Col2 & Row2, Col3\\

Row3, Col1 & Row3, Col2 & Row3, Col3\\

`\hline`

`\end{tabular}`

`\end{center}`

`\end{table}`

.....

`\section{Headings}`

Main headings are to be column centered in a bold font.

They may be numbered, if so desired.

`\subsection{Subheadings}`

Subheadings should be in a bold font. They should start at the left-hand margin on a separate line.

`\subsubsection{Sub-subheadings}` They are to be in a bold font, should be indented and run in at the beginning of the paragraph.

.....

`\subsection*{Acknowledgements}`

This subsection can be used to acknowledge any kind of support to your paper (e.g., you can mention your grants).

`\begin{thebibliography}{55}`

`\bibitem{1}` M.~Goosens and S.~Rahtz, *{\it The \LaTeX Web Companion}*, Addison--Wesley, 1999.

(A Russian translation is published by Mir, 2001.)

`\bibitem{2}` A.L.~Fradkov, ‘‘Synthesis of an adaptive system of linear plant stabilization,’’

{\it Avtomat. i Telemekh.},

no.~12, pp.~96--103, 1974 (Russian).

.....

`\end{thebibliography}`

`\end{document}`