An example on using the QPSR LaTeX2e class

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Here write the affiliation only if it is different from TMH

Abstract

This is an example on how to use the LaTeX2e class `qpsr.cls` *for writing articles in the style adopted by the Quartely Progress and Status Report (QPSR) at the department for Speech, Music and Hearing (TMH) at the Royal Institute of Technology (KTH) in Stockholm. This example will describe some of the standard features of LaTeX2e and the additional commands provided by the class.*

Introduction

Provided that you have the `qpsr.cls` file in the same directory as the `.tex` file, or somewhere in the LaTeX search path, the document class is specified by the command:

```
\documentclass[a4paper,
       twoside,11pt]{qpsr}
```

A number of packages can then be included depending of the special needs of the author. This is done with the `\usepackage` command (look at the `.tex` file in the distribution for examples).

The number of the first page is specified for example with the command `\firstpage{69}`. The volume number and the publication year are specified by the commands (defined by the class) `\volume` and `\pubyear`. These will appear, together with the author's name and the title in the headers and footers for each page. You should ask Cathrin Dunger for the right numbers to use.

Title and author are defined as usual by the `\title` and `\author` commands. A new command `\affiliation` is provided for affiliation. Note that this should be omitted if the affiliation is the department for Speech, Music and Hearing. Another special command is the `\abstracttext`. Usually in LaTeX the abstract is defined using the environment `abstract` after the `\begin{document}` command. For technical reasons, here the `abstract` environment is not used, but rather the command `\abstracttext` is used in the preamble and the abstract is generated by the `\maketitle` command.

Sections, subsections..., are started with the usual `\section`, `\subsection`... commands. There is no need to use the "starred" version of these commands as numbering is omitted by default.

For the rest, normal LaTeX commands can be used to produce cross references (`\label` and `\ref`), tables and figures, with the corresponding environments, mathematical formulas, citations (using the `natbib` package that is automatically loaded by the class). Note that setting labels to sections and subsections is useless as there is no numbering in the QPSR style (unfortunately). Examples of this and more can be found in the rest of this document. In case you are reading a PostScript or PDF version of it you are referred to the `example.tex` file that was used to generate them.

One of the best ways to produce a bibliography is to create a BibTeX file (see `example.bib` in the distribution). The citations can be obtained by using one of the following commands. If the citation comes in the end of a phrase, the `\citep` command should be used, e.g.

> ...the first attempts to simulate the flow-induced oscillations were based on a lumped- element model (Smart and Smarter, 1968).

If the author is cited directly in the text, then the `\citet` command should be used instead, e.g.

> An essential improvement to the one-mass model was proposed by Dull et al. (1998), with their two-mass model.

For more information, refer to the BibTeX and `natbib` documentation (e.g. Goossens et al., 1994, ch. 13). Another good reference for LaTeX in general is (Oetiker et al., 2004) (just google on the net).

Inserting Figures and Tables

Also the figures and tables can be inserted with standard LaTeX commands. This is an example:

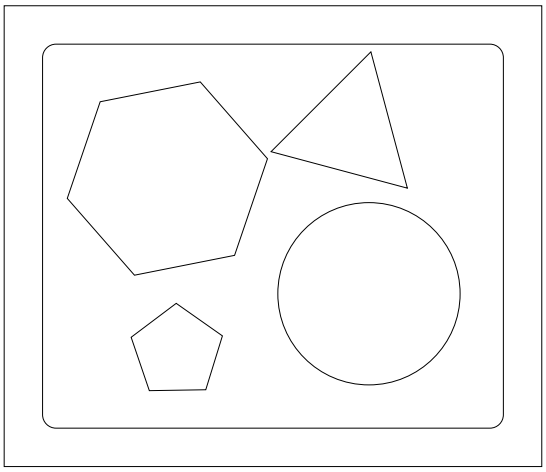

Figure 1: An abstract figure.

```
\begin{figure}
\centering
\includegraphics[scale=0.8]
  {figures/figb.eps}
\caption{An abstract figure.}
\label{fig:abstract}
\end{figure}
```

The above code is used to produce Figure 1. Note that I used the command `\ref{fig:abstract}` to generate the figure number in the previous sentence.

If you want to include figures that span two columns, use the "starred" version of the `figure` environment, i.e.

```
\begin{figure*}
...
\end{figure*}
```

An example will be given later.

Inserting tables is as easy, just remember to put the caption above the table, i.e

```
\begin{table}[b]
\centering
\caption{This is the table
   caption (above the table)}
\label{tab:example}
\begin{tabular}{cc}
  \hline \hline
  Parameter & Value \\
  \hline
  \\
  $m$ & $0.00017$ $kg$   \\
  $L$ & $0.014$ $m$ \\
  $x_0$ & $0.005-0.1$ $mm$ \\
  \hline \hline
\end{tabular}
\end{table}
```

The above code is used to generate Table 1. Note that in this case I added the option `[b]` that indicates I wish the table to be at the bottom of the page, if possible. Other options for floating object placement are: `[h]` for "here", i.e. the insertion point in the text, `[t]` for "top" that is the default, and `[p]` to put it in a special page that collects all floating objects. These options are just an indication of preference, and they are overridden by other type-setting rules. If you want to strengthen your determination against the evil computerised type-setter, put an exclamation mark in front of the option (`[!h]`), but note that the type-setter is still setting the rules, to some extent.

Lots of meaningful words

This section is just a filler to come to the next page.

Peace and love peace and love peace and love peace and love peace and love peace and love peace and love peace and love peace and love peace and love peace and love peace and love peace and love peace and love peace and love peace and love peace and love peace and love peace and love

Peace and love peace and love peace and love peace and love peace and love peace and love peace and love peace and love peace and love peace and love peace and love peace and love peace and love peace and love peace and love peace and love peace and love peace and love

Peace and love peace and love peace and love peace and love peace and love peace and love peace and love peace and love peace and love peace and love peace and love peace and love peace and love peace and love peace and love peace and love peace and love peace and love

It's never enough!

Peace and love peace and love peace and love peace and love peace and love peace and love peace and love peace and love peace and love peace and love peace and love peace and love peace and love peace and love peace and love peace and love peace and love peace and love

Peace and love peace and love peace and love peace and love peace and love peace and love peace and love peace and love peace and love peace and love peace and love peace and love peace and love peace and love peace and love peace and love peace and love peace and love

Peace and love peace and love peace and love peace and love peace and love peace and love peace and love peace and love

Table 1: This is the table caption (above the table)

Parameter	Value
m	$0.00017\ kg$
L	$0.014\ m$
x_0	$0.005 - 0.1\ mm$

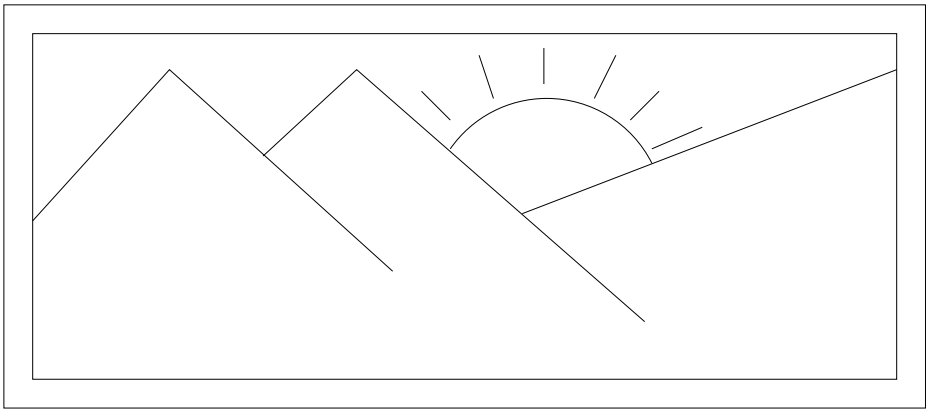

Figure 2: A more concrete figure.

peace and love peace and love peace and love peace and love peace and love peace and love peace and love peace and love.

A last example

As promised in a previous section an example of a two-column figure is Figure 2

Last page and column balancing

To balance the length of the two (incomplete) columns on the last page, use the `\balance` command. This sould be is issued before the first column of the last page is finished. NOTE: this command can cause problems with the displacement of floating objects (figures and tables). If you encounter such problems, remove the command (you will get unbalanced columns on the last page).

Acknowledgement

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References

Dull E, Mean R and Insipid J (1998). Kind of boring discussion on a totally irrelevant subject. *Se & Hör*, 3(2):20–3450.

Goossens M, Mittelbach F and Samarin A (1994). *The Latex Companion*. Series on Tools and Techniques for Computer T. Addison-Wesley.

Oetiker T, Partl H, Hyna I and Schlegl E (2004). *The Not to Short Introduction to LaTeX2e*.

Smart J and Smarter A (1968). Very interesting study on a very interesting subject. *Novella 2000*, 3(2):5–6.