

This document provides a quick intro to the usage of the `ethuebung` package for exercise sheets. Please refer to the complete documentation for a more complete overview of the features of this package.

The philosophy of this package is to have all contents related to an exercise sheet contained in a *single* L^AT_EX file, which then can generate both the exercise sheet and the solutions sheet.

Getting Started.

Simply copy the style file `ethuebung.sty` into the same directory as your exercise sheet L^AT_EX file. No other files are needed (no logo images etc. are needed as they are packaged with the style file). Then start off with the following template.

```
\documentclass[11pt,a4paper]{article}

\usepackage{ethuebung} % comment this and uncomment next line for solutions
%\usepackage[sol]{ethuebung} % uncomment for solutions

\UebungLecture{Microstructures of molten cheese.}
\UebungProf{Prof. Zebigboss}
\UebungSemester{HS 2999}

\UebungsblattNumber{1}

\begin{document}
\MakeUebungHeader

\exercise{Title of the exercise.}
\keywords{Stern-Gerlach, spin, quantum measurement}

In this exercise, you will be asked to do some work.

\begin{exenumerate}
\item Solve the following equation.
  \begin{align}
x^2 &= 1 \ .
\end{align}
\hint{There might be more than one solution.}

  \begin{solution}
    Write here the solution to this exercise.
  \end{solution}
\end{exenumerate}

\end{document}
```

Setting up the Exercise Sheet.

Obviously you'll have to fill in the title of your lecture, the lecturer and the semester accordingly using the `\UebungLecture`, `\UebungProf` or `\UebungLecturer`, and `\UebungSemester` commands. Use the `\UebungsblattNumber` command to specify the number of the exercise sheet (usually increases by one every week). Don't forget the `\MakeUebungHeader` command at the beginning of the document to actually draw the header.

The Solutions Sheet.

Write the solutions to each exercise inline, using a `\begin{loesung}...\end{loesung}` or `\begin{solution}...\end{solution}` environment. When you compile your file (as in the template), then the solutions will simply be discarded and will not appear in the document.

If you want to generate a solutions sheet with the solutions displayed (eg. for the TA's or for the students after they handed in), then simply change the two lines:

```
\usepackage{ethuebung} % comment this and uncomment next line for solutions
%\usepackage[sol]{ethuebung} % uncomment for solutions
```

to:

```
%\usepackage{ethuebung} % comment this and uncomment next line for solutions
\usepackage[sol]{ethuebung} % uncomment for solutions
```

Recompile the sheet, and the solutions will be displayed.

Language Selection.

If you want the **German** version of the template, simply pass the `[deutsch]` option to the `\usepackage` directive,

```
\usepackage[deutsch]{ethuebung} % German version, "Uebungsblatt"
%\usepackage[deutsch,sol]{ethuebung} % German version, "Musterloesung"
```

Teaser—Some More Features

Here are some features implemented in this package. If you want to use them, refer to the main documentation (User's Manual).

- The `\begin{exenumerate}...\end{exenumerate}` environment behaves very much like the `\begin{enumerate}...\end{enumerate}` environment, with automatic (a), (b), ... numbering (and (i), (ii) nested numbering), and more features.

- You should add keywords to exercises with the `\keywords{...}` command. This expands to nothing in the PDF file, but can be used to search for relevant exercises by searching in the \LaTeX files.
- You can generate an extra “Tips” sheet with extra comments on how to solve the exercises. Check out `\begin{tips}...\end{tips}`.
- If you have e.g. scanned handwritten solutions, you can attach them at the end of the solutions sheet automatically. Use the `\pdfloesung` command.
- You can make “sub-exercises” with the `\subuebung/\subexercise` commands.
- You can use the scripts `pdflatexex`, `pdflatex tips`, and `pdflatexsol`, to directly generate the relevant PDFs from the exact same \LaTeX file, adding the correct respective suffixes `*_ex.pdf`, `*_tips.pdf`, and `*_sol.pdf`.
- All aspects of the exercise sheet are customizable without modifying the style file. Check out the documentation. You can also use different styles to change the appearance of your sheet—check out the `\UebungStyle` command. For example, there’s a cool ETH-UniZH style with the logo of the University of Zurich, too.
- If you want to make special sheets, like “Revision Sheet”, or “Extra Series During Holiday for if You’re Bored”, etc., you can also redefine some aspects of your sheet (e.g. `\uebSerieTitle`) to bypass the usual numbering mechanism.
- ... and much more !