

# The fbithesis package\*

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## Abstract

`fbithesis.cls` is a L<sup>A</sup>T<sub>E</sub>X 2<sub>ε</sub> document-class tuned for research reports or internal reports like master/phd-theses at the TU Dortmund University.

At the Department of Computer Science at the TU Dortmund there are cardboard cover pages for internal reports like master/phd-theses. The main function of the L<sup>A</sup>T<sub>E</sub>X 2e document-class provided by this package is a replacement for the `\aketitle` command to typeset a title page that is adjusted to these cover pages.

See `README` for a short overview and additional (legal) information and `example.tex` for—of course—an example.

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\*This file has version number v1.2n. It was last revised on 2011/02/07, the documentation is dated 2008/02/17.

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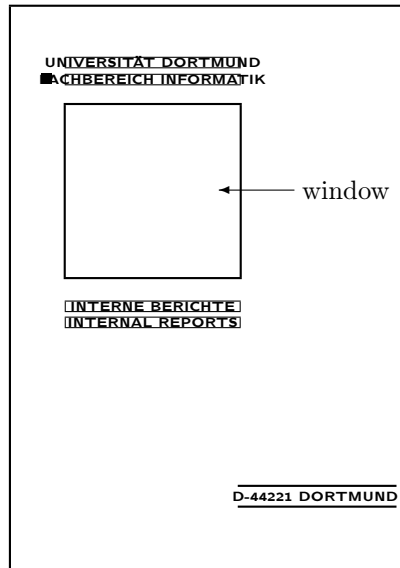


Figure 1: A rough outline of the DIN-A4 cardboard cover page for diploma and doctoral theses and project reports provided by the Department of Computer Science at the TU Dortmund. The title page of the document is visible through the window.

## 1 Introduction

At the Department of Computer Science at the TU Dortmund University there are cardboard cover pages (see figure 1 on page 2) for internal reports like master/phd-theses. The main function of the  $\LaTeX$  2 $\epsilon$  document-class `fbthesis` is to replace the `\maketitle` command to typeset a title page that is adjusted to these cover pages (see figure 2 on page 3).

As you can see the title page is not only adjusted to the cardboard, but even imitates the cover: it repeats the text found on the cover page. Usually theses are presented to the world in two shapes: printed on paper or electronically (e.g. as a PDF or PostScript file). In the first case the repetition is not necessary, in the second (electronical) case one would miss important information without it. Since it doesn't hurt in the paper case I decided to make it possible to repeat this 'decoration' of the cover page on the title page (see options `decor` and `nodecor` in section 2.2).

This package doesn't make much sense outside of Germany or even outside the TU Dortmund. Nevertheless the documentation is in English. This shouldn't be a problem nowadays and it's a good training for me ;-)

v1.2m2011/02/06new

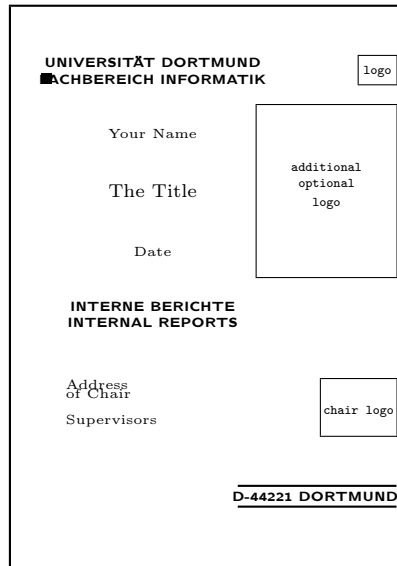


Figure 2: The title page as generated by `fbithesis`. The important part of the title page (author, title and date) is visible through the window in the cover page. This sketch can only give you a very coarse impression. For a more authentic one use the example (see section 4 on the pages 14ff).

## 1.1 Why the name?

When this package was created, the Department of Computer Science had the name ‘Fachbereich Informatik’ in german. The abbreviation ‘FBI’ was quite common in those days. Since the package is meant for that department I used the abbreviation for my package. (And of course because its kinda cool ;-))

In the meantime however the ‘Universität Dortmund’ was renamed to ‘Technische Universität Dortmund’ (technical university of Dortmund) and the department to ‘Fakultät für Informatik’.

## 1.2 Other packages

Apart from `fbithesis` there is at least one more approach that deals with the same subject. This is `diplomatitle`<sup>1</sup> by THOMAS LEINWEBER<sup>2</sup>. `diplomatitle` isn’t officially released. It hasn’t left development status yet and it is doubtful if it ever will, as the author seems to have abandoned active development.

Together with THOMAS, MARC SEITZ<sup>3</sup> wrote `pgthesis` which is based on `fbithesis`. It aims at final reports of project groups (Projektgruppen End-

<sup>1</sup><http://ls6-www.cs.uni-dortmund.de/~leinweb/tex/interneBerichte/> (Some of the files aren’t reachable. Perhaps you have to contact the author first.)

<sup>2</sup><THOMAS LEINWEBER> [leinweb@ls6.cs.uni-dortmund.de](mailto:leinweb@ls6.cs.uni-dortmund.de)

<sup>3</sup><MARC SEITZ> [marc@marcseitz.de](mailto:marc@marcseitz.de)

berichte) but isn't yet officially released. If you are interested please contact the authors.

Some other approaches use the `titlepage` environment and provide a sort of template for the title page. Representatives of these approaches are for example the 'L<sup>A</sup>T<sub>E</sub>X-Templates'<sup>4</sup> by KOHLER<sup>5</sup> or 'daTitelblatt'<sup>6</sup> by DITTRICH<sup>7</sup>. Of course these template-approaches give a great flexibility to the user. On the other hand the necessary customization often requires a deeper knowledge of L<sup>A</sup>T<sub>E</sub>X.

Additionally there is `udotitle`<sup>8</sup> by GERD SEBASTIANI. This package however does not produce a title page to be used with the cardboard of the department of computer science but complies with the official corporate design of the university.

### 1.3 What's new

Since the last stable version v1.0d (2003/01/08) some new features were added:

1. compatibility with the  $\mathcal{A}\mathcal{M}\mathcal{S}$ -classes (`amsbook` or `amsreport`) as baseclasses (see section 2.3.4 on page 13)
2. better handling of baseclass-specific macros
3. new options `decor` and `nodecor` (see section 2.2.3 on page 10)
4. better warnings if needed files could not be found
5. new options `ngerman` and `american` (see section 2.2.2 on page 9)
6. new options `declaration` and `nodeclaration` (see section 2.2.4 on page 11)
7. the university and the department were renamed since the last public release.

### 1.4 What do you need

There are some packages, that are required with the use of `fbthesis`. Some others are recommended.

1. Packages, that are essentially required by `fbthesis`:
  - (a) L<sup>A</sup>T<sub>E</sub>X 2<sub>ε</sub> (at least the 1994/12/01 release)<sup>9</sup>  
`fbthesis` is a L<sup>A</sup>T<sub>E</sub>X 2<sub>ε</sub> document-class. So obviously you'll need L<sup>A</sup>T<sub>E</sub>X 2<sub>ε</sub>...
  - (b) `graphicx`<sup>10</sup> (at least 1996/08/05 v1.0a)  
The logos are included by using the `\includegraphics` command provided by `graphicx`.

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<sup>4</sup><http://ls7-www.cs.uni-dortmund.de/~kohler/verschiedenes/LaTeX-Templates.tgz>

<sup>5</sup><MARKUS KOHLER> [markus.kohler@uni-dortmund.de](mailto:markus.kohler@uni-dortmund.de)

<sup>6</sup><http://ls11-www.cs.uni-dortmund.de/resources/docs/daLatex/daTitelblatt.tex>

<sup>7</sup><PETER DITTRICH> [gisbert.dittrich@udo.edu](mailto:gisbert.dittrich@udo.edu)

<sup>8</sup><http://www.forum.fset.de/>

<sup>9</sup>CTAN: [macros/latex/base](http://www.ctan.org/macros/latex/base)

<sup>10</sup>CTAN: [macros/latex/required/graphics/graphicx.dtx](http://www.ctan.org/macros/latex/required/graphics/graphicx.dtx)

2. Packages, that are recommended to use with `fbithesis`:

- (a) `scrbook` (part of KOMA-Script<sup>11</sup>, at this time the latest version is 2007/12/24 v2.98)

This is a replacement for the (standard) `book` document-class and has many enhancements and useful features.

3. Packages, that are supported by `fbithesis`:

- (a) `amsbook` (part of  $\mathcal{A}\mathcal{M}\mathcal{S}$ - $\mathcal{L}\mathcal{A}\mathcal{T}\mathcal{E}\mathcal{X}$ <sup>12</sup>, at this time the latest version is 2004/08/06 v2.20)

Like KOMA-Script this is a replacement for the `book` class. This one follows the style conventions of American Mathematical Society publications.

Under normal circumstances you don't have to install any special packages (except `fbithesis` of course: its installation process is described in the next section) since all these should be part of every serious  $\mathcal{L}\mathcal{A}\mathcal{T}\mathcal{E}\mathcal{X}$ -distribution. If this is not the case you'll find the most recent versions at CTAN<sup>13</sup>.

## 1.5 Installation

file `fbithesis.dtx` The file `fbithesis.dtx` is an 'one-file-contains-it-all'. It contains (of course) the `.cls`-file and its documentation (not to forget a customizable driver for the docu), but also the `.ins`-batch file, an example and a 'read me'.

file `fbithesis.dtx.asc` It is recommended to check the integrity of the package before installing. This is done with `fbithesis.dtx.asc`, an OpenPGP signature made with GnuPG and the key 1024D/F4D24AC9 2002-04-01 Andre Dierker (software distribution key) <software@kand.de><sup>14</sup>. Verify `fbithesis.dtx.asc` with PGP or GnuPG (for GnuPG this is 'gnupg --verify fbithesis.dtx.asc') to be sure, you got the complete and unmanipulated distribution.

### 1.5.1 By Hand

To start the installation, run `fbithesis.dtx` through  $\mathcal{L}\mathcal{A}\mathcal{T}\mathcal{E}\mathcal{X}$ <sup>15</sup>. This will generate the batch file (`fbithesis.ins`) and a `README`. Additionally the documentation (`fbithesis.dvi`) is generated (to get the cross-references right, you have to rerun this twice, however).

file `fbithesis.ins` The actual installation is done by running the newly generated `fbithesis.ins` through  $\mathcal{L}\mathcal{A}\mathcal{T}\mathcal{E}\mathcal{X}$ . This will generate the `fbithesis.cls` file, an `example.tex`, the documentation driver (`fbithesis.drv`) and a sample configuration file

<sup>11</sup>CTAN: [macros/latex/contrib/koma-script](#) by FRANK NEUKAM and MARKUS KOHM [14, 10]

<sup>12</sup>CTAN: [macros/latex/required/amslatex](#) by the AMERICAN MATHEMATICAL SOCIETY [1, 2]

<sup>13</sup>Comprehensive  $\mathcal{T}\mathcal{E}\mathcal{X}$  Archive Network: <http://www.ctan.org/>

<sup>14</sup>BTW: I'm always looking for people to exchange key-signatures. Contact me!

<sup>15</sup>It is recommended to use `pdflatex` instead of `latex`. If you prefer an output in DVI-format you can use '`pdflatex -ouput-format DVI`'

(`fbithesis.cfg`). If you have set `\BaseDirectory`<sup>16</sup> in your `docstrip.cfg`, the document-class `fbithesis.cls` is immediately moved to an appropriate location (e.g. `$(TEXMF)/tex/latex/misc/` with a TDS<sup>17</sup> compliant L<sup>A</sup>T<sub>E</sub>X installation). Otherwise you have to move it yourself into a directory searched by L<sup>A</sup>T<sub>E</sub>X. *If you don't know where this could be simply drop the file into your thesis' directory.*

Now you could already start since the rest of the installation process is optional.

file `fbithesis.cfg` Normally (with a TDS installation) all configuration (`.cfg`) files are collected in `$(TEXMF)/tex/latex/config/`. Since there may be already an older `'fbithesis.cfg'` that perhaps mustn't be overwritten, you have to move (and merge) the file yourself.

To finish the installation it is recommended to move `fbithesis.dvi` and `example.tex` to where you collect the documentations (with a TDS compliant L<sup>A</sup>T<sub>E</sub>X installation this would be `$(TEXMF)/doc/tex/latex/fbithesis/` for example).

file `example.tex` For a demonstration of the possibilities of `fbithesis` see the example file and run it through L<sup>A</sup>T<sub>E</sub>X.

file `fbithesis.drv` The `'pdflatex fbithesis.dtx'`-run above will—by default—generate the 'user' documentation. If you need the full documentation (with complete listing of the documented source code and/or command index and the change history) you may edit `fbithesis.drv` to meet your needs (never edit `fbithesis.dtx` itself!). For more information on the enhanced documentation see `fbithesis.drv` or `README`.

So, in short you have to do the following:

1. Check the integrity of the package: `'gnupg --verify fbithesis.dtx.asc'`
2. Generate the documentation: `'pdflatex fbithesis.dtx'`
3. Generate the `fbithesis.cls` file: `'pdflatex fbithesis.ins'`
4. Finish the documentation: `'pdflatex fbithesis.dtx'` (two times)
5. move `fbithesis.cls` (e.g. to your thesis' directory)
6. Optional: move `fbithesis.dvi` and `example.tex`

### 1.5.2 By make

Alternatively you can use `make` to do the tasks. In this case you have to do the following:

1. Check the integrity of the package: `'gnupg --verify fbithesis.dtx.asc'`
2. Generate the documentation: `'make doc'`
3. Generate the `fbithesis.cls` file: `'make install'`

---

<sup>16</sup>see the documentation of the `docstrip` program: [12]

<sup>17</sup>T<sub>E</sub>X Directory Structure, see [15]

4. move `fbithesis.cls` (e.g. to your thesis' directory)
5. Optional: move `fbithesis.dvi` and `example.tex`

## 1.6 To do

At this time the package doesn't offer many features. I plan to add a few as soon as I have the time to:

1. The logos of university and department have changed and need to be updated. If someone can provide files, please mail me.
2. Better support for final reports of project groups (Projektgruppen Endberichte)
3. Provide some alternative layouts
4. Provide a `titlepage`-like environment to give the user more flexibility.
5. Adopt `fbithesis` to the layout of the research reports, a second series with own cover pages. (These use DIN-A5 instead of DIN-A4 as paper format.)
6. At this time `fbithesis` affects only the title page and doesn't interfere with the layout of the rest of the document. Enhance the package to a full 'thesis'-class, perhaps by integrating the 'L<sup>A</sup>T<sub>E</sub>X-Templates' (see subsection 1.2 on page 3f).
7. Fix bugs (see subsection 1.7), misspellings or whatever.

If you have any further suggestions for enhancements or corrections feel free to mail me.

## 1.7 Known Bugs

Actually I'm aware of one bug:

- To provide the `\thanks`-mechanism I had to redefine `\footnote`. At the end of `\maketitle` the `\footnote` command is reset to its original definition. Unfortunately the definition is *not* reset, if there's no `\maketitle` in your document. A solution is not known.

If you have a solution to fix the bug or if you find a new one I'd be glad to hear<sup>18</sup> from you!

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<sup>18</sup>mail to <ANDRE DIERKER> [dierker@kand.de](mailto:dierker@kand.de)

## 1.8 Thanks

Thanks go to STEPHAN LEHMKE, the local T<sub>E</sub>X- and L<sup>A</sup>T<sub>E</sub>X-Guru at the University of Dortmund. He put the idea of writing this package into my mind and helped with many tips and hints. Furthermore I'd like to thank KLAUS KRAMER. He gave me feedback and pointed me to a bug. Further bugs were found by MATTHIAS SCHWEINOCHE and RALF KELLERMANN.

ROMAN KLINGER suggested to make the decoration optional (see the options `decor` and `nodecor` in section 2.2, CLEMENS RENNER proposed the inclusion of a declaration in `fbithesis`, while DIRK FÖRSTERLING gave feedback to the installation routine.

TIMON KELTER provided information about the renaming of university and department and so triggered a new release.

Furthermore thanks go to QuinScape<sup>19</sup>, the company that lets me use my T<sub>E</sub>X-Skills to earn a living. They have a great product named DocScape<sup>20</sup>. Do you have a large amount of data, that has to be layouted? Give DocScape<sup>21</sup> a try. It is a solution for data based publishing with a rule based layout. It makes possible a complete automatic but nevertheless extreme flexible layout and produces really high quality output.

Finally I want to thank the three most important persons in my life: my wife KATHARINA, my daughter HANNA and my son NOAH. I love you.

## 2 Usage

Now lets come to the interesting stuff.

### 2.1 The *baseclass* and loading

You are free to choose your favorite thesis-document-class as the *baseclass*, since the only part concerned by `fbithesis` is the title page. `fbithesis` doesn't interfere with the layout of the rest of your document.<sup>22</sup> By default `fbithesis` will use `scrbook` (part of KOMA-Script, see [14]) as *baseclass*.

`\baseclass` You may change the *baseclass* by defining the macro `\baseclass`. **Important:** *this has to be done before the `\documentclass` command!* (See the example in section 4 on the pages 14ff.) For example if you prefer the standard class `book` from L<sup>A</sup>T<sub>E</sub>X 2<sub>ε</sub> simply do:

```
\def\baseclass{book}
```

Afterwards the class is loaded with:

```
\documentclass{fbithesis}
```

---

<sup>19</sup><http://www.QuinScape.de/>

<sup>20</sup><http://www.DocScape.de/>

<sup>21</sup>Contact us: [Norbert.Jesse@QuinScape.de](mailto:Norbert.Jesse@QuinScape.de)

<sup>22</sup>However this may change in the future, see subsection 1.6 on page 7



You can modify the behaviour of `fbithesis` with options (all available options are described below in subsection 2.2):

```
\documentclass[<options>]{fbithesis}
```

option titlepage You may choose every L<sup>A</sup>T<sub>E</sub>X 2<sub>ε</sub>-document-class as *baseclass*, on condition that it provides a `\maketitle` command (and its supportive commands as described in subsection 2.3.1 on page 11) and supports a title page. For example with `article` from L<sup>A</sup>T<sub>E</sub>X 2<sub>ε</sub> you have to use its `titlepage` option, since `article` doesn't generate an explicit title page by default.

## 2.2 Options

There are several class options available with `fbithesis`. Most of the following options are mutual exclusive. (For example `draft` and `final`; `german/ngerman` and `english / american` and others.) If you do specify two opposing options like in this example

```
\documentclass[draft,final]{fbithesis}
```

the last one (in this case `final`) 'wins'. However both global options are passed to the packages. So in this example

```
\documentclass[english,american]{fbithesis}
```

`english` will be a kind of fallback if a package doesn't implement the option `american`.

### 2.2.1 draft/final

option draft The first two options switch between the `draft` and `final` mode. The `draft` mode  
option final adds some marks to the title page to help with the positioning of the page (see section 3 on page 13).

```
\documentclass[draft]{fbithesis}
```

In the `final` mode of course no marks are shown.

```
\documentclass[final]{fbithesis}
```

### 2.2.2 Language options

option german The second bunch of options switches the language. As you can see below (in subsection 2.3.2 on page 12) the supervisors of the thesis can be added to the title page by using the macro `\supervisors`. These are captioned by 'Gutachter:' with the `german` option.

```
\documentclass[german]{fbithesis}
```

option english If you want to do your thesis in English, the 'Gutachter:' would spoil the effect. It is replaced by 'Supervisors:' with the `english` option.

```
\documentclass[english]{fbithesis}
```

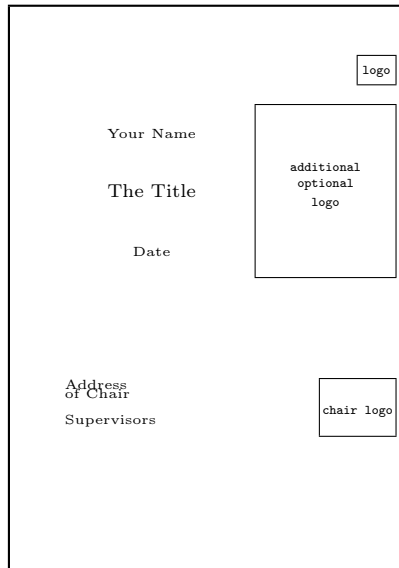


Figure 3: The title page as generated by `fbithesis` with option `nodecor`. To compare with the repeated decoration please refer to figure 2 on page 3

New feature

2003/06/30 v1.1i

- option `ngerman`
- option `american`
- option `german`
- option `english`

There are two more class options: `ngerman` and `american`. These are just synonyms for `german` and `english`. Since class (or global) options are passed to the imported styles (by `\usepackage`) the synonyms can make things easier: you don't have to specify the optional argument with language-specific packages. So you can write

```
\documentclass[ngerman]{fbithesis}
\usepackages{babel}
```

instead of

```
\documentclass[german]{fbithesis}
\usepackages[ngerman]{babel}
```

option `ngerman` The language `ngerman` is the default choice.

### 2.2.3 `decor/nodecor`

New feature

2005/12/22 v1.2d

- option `decor`
- option `nodecor`

The options `decor` and `nodecor` control the decoration on the title page. As already said in section 1 it is possible to repeat the decoration of the cardboard on the title page. To do this, all you have to do is:

```
\documentclass[decor]{fbithesis}
```

(which is the default behaviour). If you don't want the decoration (as shown in figure 3) you can use

```
\documentclass[nodecor]{fbithesis}
```

New feature  
2006/01/18 v1.2e

option declaration  
option nodeclaration

## 2.2.4 declaration/nodeclaration

If you do a diploma thesis you'll have to give a declaration that you have written everything by yourself. By the options `declaration` and `nodeclaration` you are able to include this declaration into your thesis:

```
\documentclass[declaration]{fbithesis}
```

This inserts a new page with a form of the declaration. Since the text is taken from the Diplomprüfungsordnung it should be sufficient for the deans office. You only have to sign it.

As you might have guessed

```
\documentclass[nodeclaration]{fbithesis}
```

will suppress the declaration. This is the default behaviour.

## 2.2.5 Paper options

The position of the various elements on the title page is implemented in the class option `a4paper`. There is no need for a alternative letter because the cardboard is only offered in the paper format DIN-A4 (and DIN-A5 but that is a topic for further development. See section 1.6 on page 7). Since there is no other paper format implemented at the time, the option `a4paper` is the default behaviour.

## 2.2.6 Options of the *baseclass*

Furthermore you may choose every option provided by the *baseclass* (see subsection 2.1 on page 8), since all other options are forwarded to it. For example with the default *baseclass* `scrbook`<sup>23</sup> you may want something like this:

```
\documentclass[10pt, a4paper, BCOR12mm, headsepline]{fbithesis}
```

For a description of possible options of your chosen *baseclass* look at the corresponding documentation. The `scrbook`-options used above for example are described in [14, 10].

## 2.3 Commands

### 2.3.1 L<sup>A</sup>T<sub>E</sub>X-Commands

As in the standard L<sup>A</sup>T<sub>E</sub>X 2<sub>ε</sub> classes the user defines the title and author by the declarations<sup>24</sup> `\title{<name>}` and `\author{<name>}`. As in the standard L<sup>A</sup>T<sub>E</sub>X 2<sub>ε</sub> classes multiple authors have to be separated with `\and`. In general master/phd-theses won't have more than one author, but just in case (and because it will be needed for research reports, see subsection 1.6 on page 7) the `\and` command is also provided.

```
\title  
\author  
  
\and
```

<sup>23</sup>`scrbook` is part of KOMA-Script by FRANK NEUKAM and MARKUS KOHM

<sup>24</sup>For a more detailed view on these macros please look at [3].

	The <code>\date</code> command differs from the definition in the L <sup>A</sup> T <sub>E</sub> X-Kernel. In the standard L <sup>A</sup> T <sub>E</sub> X 2 <sub>ε</sub> classes the command is used to specify the date of the document: <code>\date{&lt;date&gt;}</code> . In <code>fbithesis</code> the macro is enhanced by an optional argument to specify the period of the thesis: <code>\date[&lt;begin date&gt;]{&lt;end date&gt;}</code> . If you leave out the optional argument only the end date is set, if you leave out the whole <code>\date</code> command, <code>\date{\today}</code> is assumed by default.
<code>\date</code>	
<code>\maketitle</code>	As in the standard classes the title is set by using the <code>\maketitle</code> <sup>25</sup> command. This is redefined in this package to match the cardboard cover page of the Department of Computer Science at the TU Dortmund.
<code>\thanks</code>	If you really want to make acknowledgements on the title page you may use <code>\thanks{&lt;text&gt;}</code> . The text would be set as a footnote at the bottom of the cardboard window. In my opinion this does not look well and I recommend not to use <code>\thanks</code> . The correct place for eMail-addresses, acknowledgements, dedications and such things is a preface or—if you use <code>scrbook</code> or <code>scrreprt</code> as the <i>baseclass</i> —the enhanced title of KOMA-Script (see subsection 2.3.3 and [14, 10])
<code>\title</code>	The <code>\title</code> and <code>\author</code> commands are mandatory: You have to define them if you want <code>fbithesis</code> to do its job. All other commands are optional. So the only thing you have to do to use this package is to choose your favorite <i>baseclass</i> (see subsection 2.1 on page 8), load <code>fbithesis</code> and provide the information you would like to have on the title page.
<code>\author</code>	

### 2.3.2 fbithesis-Commands

The commands above are all provided by the standard L<sup>A</sup>T<sub>E</sub>X classes. In `fbithesis` there are a few more commands to provide additional information.

<code>\subject</code>	By the command <code>\subject{&lt;sub&gt;}</code> you may provide the ‘type’ of the thesis (like ‘Diplomarbeit’, or ‘Dissertation’). As the L <sup>A</sup> T <sub>E</sub> X-commands above (see subsection 2.3.1) <code>\subject</code> , too, affects the look in the window of the cardboard. The content of the following commands is placed in other areas of the title page and isn’t visible through the window.
<code>\unidologo</code>	By using the command <code>\unidologo{&lt;filename&gt;}</code> you may include the logo of the TU Dortmund to the title page. ‘<filename>’ should be a graphics file (e.g. PDF). Additionally it is possible to add the logo of the chair to the title page.
<code>\chairlogo</code>	This is done by <code>\chairlogo{&lt;filename&gt;}</code> .
<code>\thesislogo</code>	If you have a thesis-specific logo, it can be placed on the title page by using <code>\thesislogo{&lt;filename&gt;}</code> . The logo is set next to the window of the cardboard (see figure 2 on page 3).
<code>\chair</code>	Some folks want the names of the chair, the department and the university to appear on the title page. This can be done by <code>\chair{&lt;information&gt;}</code> . The argument <information> may consist of lines separated by ‘\’.
<code>\supervisors</code>	The supervisors of the thesis may be provided by <code>\supervisors{&lt;first supervisor&gt;}{&lt;second supervisor&gt;}</code> .
	<i>Please note:</i> Due to aesthetic reasons it is recommended to use <code>\chair</code> , <code>\chairlogo</code> and <code>\supervisors</code> only in combination: either all or none.

<sup>25</sup>See [11] for the original definition

### 2.3.3 KOMA-Script-Commands

file KOMA-Script `fbithesis` supports parts of the enhanced title of KOMA-Script. So if you use `scrbook` or `scrreprt` you may use the following KOMA-Script-commands. For more information on these three macros see [10, section 3.3].

`\uppertitleback` normally is left empty. You can use the commands `\uppertitleback{<text>}` and `\lowertitleback` `\lowertitleback{<text>}` to place additional information there.

`\dedication` KOMA-Script provides a special dedication page. If you want to dedicate your thesis to someone, use `\dedication{<text>}`.

There are some more KOMA-Script-commands affecting the title. These are ignored by `fbithesis` since they are useless in our case: `\extratitle` is not necessary since the cardboard cover serves exactly the purpose of the cover page `\extratitle` would produce. `\titlehead` would mess up the layout of the title page and `\publishers` is nonsense since no thesis has got a publisher.

### 2.3.4 $\mathcal{AMS}$ -Commands

file  $\mathcal{AMS}$  `fbithesis` also supports `amsbook` as baseclass. However the  $\mathcal{AMS}$ -classes use a different macro for the dedication than KOMA-Script. So if you choose `amsbook` as baseclass you may use the command `\dedicatory{<text>}`. For more information on this macro see [2, chapter 3].

There are some more  $\mathcal{AMS}$ -commands affecting the title. These are ignored by `fbithesis` since they are useless in our case: `\subjclass`, `\keywords` and `\translators` are nonsense since no thesis is specified by the  $\mathcal{AMS}$ -classification or is translated. The other  $\mathcal{AMS}$ -commands (like `\address`, `\curraddr`, `\urladdr`, `\email`) are used to provide additional information to contact the author(s). It is unusual to provide this information on the title page of a thesis. You may include it into your preface however.

## 3 Customization

The horizontal and vertical placement of the writable area on the paper depends on many factors like page size and layout, printer margins or corrections done by the device driver. Some of these (like page layout) can be directly controlled by `TEX`, others (like page size) can be taken into account. Unfortunately there may still be some factors that cannot be influenced by this package, so a correct adjustment cannot be done completely automatically. A correct adjustment on the other hand is very important to center the title in the window in the cardboard cover.

`fbithesis` provides a “pretty good guess” concerning the placement of the title page, however a correct adjustment cannot be guaranteed. In fact the “guess” is much better than only “pretty good”: in the case of a mismatch you are strongly recommended to check the positioning of your printer. Please run ‘`latex testpage.tex`’, print a copy, check the result and correct the position-

New feature  
2003/02/07 v1.1c

file  $\mathcal{AMS}$   
`\dedicatory`

ing. However if this does not help please send a bug report to the author<sup>26</sup>. For the meantime `fbithesis` provides a stopgap solution. Positive values for `\titlevadjust` move the page up, negative values down. Similar with `\titlehadjust`: positive values move the page to the left, negative to the right.

`\titlevadjust`  
`\titlehadjust`

### 3.1 Configuration file

file `fbithesis.cfg` You may use a site-wide configuration file `fbithesis.cfg` to set some defaults. This configuration file—placed somewhere  $\LaTeX$  is able to find it—will be read whenever the `fbithesis` class is used. Of course you may overwrite these local defaults by placing concurrent definitions in your source file.

To generate the following sample configuration file, run `fbithesis.ins` through  $\LaTeX$ . On a TDS compliant  $\LaTeX$  installation the configuration files are normally collected in `$(TEXMF)/doc/tex/latex/config/`. However because there may already be an older configuration file `fbithesis.cfg` you have to move (and merge) it yourself.

```

1 <*config>
    If the graphics-files containing the logos are installed centrally, it may be useful
    to define the commands \unidologo and \chairlogo site-wide. (Conforming to
    [5] you may want to skip the extensions of the filenames.)
2 % \unidologo{tulogo}
3 % \chairlogo{ls9logo}
    The same with \chair:
4 % \chair{Chair IX (Virtual Research)}\
5 %   Department of Computer Science\
6 %   TU Dortmund}
7 </config>

```

## 4 Example

file `example.tex` Here is a little example file. To generate it, run `fbithesis.ins` through  $\LaTeX$ . First we use the `filecontents*` environment to provide the PostScript-Code of three dummy logos used by the example. The original logos should be available at your chair, contact your supervisor or system administrator.

```
8 <*example>
```

At first we include an auxiliary file that contains the logos. You can ignore this line since it is only necessary in this example.

```
9 \include{exampleaux}
```

---

<sup>26</sup>mail to <ANDRE DIERKER> [dierker@kand.de](mailto:dierker@kand.de)

fbithesis supports three classes as ‘baseclass’. To use ‘book’ or ‘amsbook’ you have to use one of the following lines. To use ‘scrbook’ from KOMA-Script as baseclass you have to do nothing since this is the default. If you don’t know what I’m talking about just leave these lines as they are. Almost everyone uses ‘scrbook’ as baseclass. It is a wise decision.

```
10 %           \def\baseclass{book}
11 %           \def\baseclass{amsbook}
```

Of course we choose `fbithesis` as document class. Additionally we want to look at the draft mode and test the option forwarding of `a4paper` to the *baseclass*. Since the example is in English, we also choose `english`.

```
option draft
option a4paper
option english
12 \documentclass[a4paper, english]{fbithesis}
```

We begin our document:

```
13 \begin{document}
14 \frontmatter
```

`\title` As in the standard L<sup>A</sup>T<sub>E</sub>X classes we use the `\title` command. Normally one can trust T<sub>E</sub>X’s ability to compute a satisfactory line breaking. However T<sub>E</sub>X’s algorithm is not optimized for titles but for continuous text. To make it more difficult the cardboard window is quite small. So if you prefer a different make up, help yourself with an appropriate placed ‘\’, as you can see in this example.

```
15 \title{Example file for the\ \texttt{fbithesis} package%}
```

`\thanks` The `\thanks` command is used to provide further information<sup>27</sup>. As you can see the result of the `\thanks` mechanism does not look well. Therefore I do not recommend the usage. It is better to write a preface instead.

```
16 \thanks{The \texttt{fbithesis}~package has version number
17 \fileversion. It was last revised on \filedate.}%
18 }
```

`\author` The usage of the `\author` command: In general master/phd-theses will have only one author, but just in case the `\and`-command is also provided.

```
19 \author{Andre Dierker%}
```

The use of the command `\thanks` is not recommended (see page 12).

```
20 % \thanks{\texttt{software@kand.de}}%
```

Perhaps there ist a second author:

```
21 \and Nobody Else%
```

Again the use of `\hanks` is not recommended.

```
22 % \thanks{\texttt{no@body.el.se}}%
```

```
23 }
```

`\subject` Normally the subject would be something like ‘Diplomarbeit’ or ‘Dissertation’...

```
24 \subject{Example}
```

`\date` You may give the beginning and the deadline of your thesis here.

```
25 \date[Created April 3, 2002]{Printed \today}
```

```

\supervisors Providing the supervisors of the thesis.
26 \supervisors{First Tutor}{Second Tutor}
    If there is a site-wide configuration file (see subsection 3.1) the commands
\unidologo \unidologo and \chairlogo may already be defined. You may override them
\chairlogo locally. Conforming to [5] we skip the extensions of the filenames. Due to this
TeX is able to include the correct version of the file (EPS or PDF)
27 \unidologo{tulogo}
28 \chairlogo{ls9logo}
\thesislogo You may use the command \thesislogo if you want to place a thesis-specific logo
on the title page.
29 \thesislogo{thesislogo}
\chair The \chair command is the other candidate for a site-wide configuration file.
This, too, can be overwritten.
30 \chair{Chair IX (Virtual Research)\
31 Department of Computer Science\
32 TU Dortmund}
    The data provided by the above macros is now used to set the title page. This
\maketitle is done with the macro \maketitle
33 \maketitle
    So after the title page is set your thesis may begin:
34 \mainmatter
...
... (Sorry, but I won't write your thesis. I've had trouble enough with my own one...;-)
...
35 Now here comes your text.
    Now our minimal document is ready.
36 \end{document}
37 </example>
    Have fun using fbithesis.

```

## 4.1 Logos

file `exampleaux.tex` Here is a auxiliary file that its used by the example. It contains the logos. We use the `filecontents*` environment to provide the PostScript- and PDF-Code of three dummy logos used by the example. The original logos should be available at your chair, contact your supervisor or system administrator.

```

38 <*exampleaux>
39 \begin{filecontents*}{tulogo.pdf}

    (Here comes some PDF-code for a provisional logo of the university.)

```

---

<sup>27</sup>You can safely ignore the `\fileversion` and `\filedate` commands. They are only helping me creating a consistent distribution of this package.



```
40 \end{filecontents*}
41 \begin{filecontents*}{ls9logo.pdf}
    (Some more PDF-code for an exemplary logo of a hypothetical chair.)
42 \end{filecontents*}
43 \begin{filecontents*}{thesislogo.eps}
    (Even more PDF-code for a dummy thesis-specific logo.)
44 \end{filecontents*}
45 </exampleaux>
```

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The **fbthesis** package has the LPPL maintenance status “author-maintained”.

The Current Maintainer of this package is Andre Dierker.

The **fbthesis** package consists of all files listed in **README**

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