

# The beamer theme for the typesetting of thesis defense presentations at the Masaryk University in Brno

Vít Novotný

November 21, 2015

## Abstract

This document details the design and the implementation of the `fibeamer` theme for the beamer document class. Included are technical information for anyone who wishes to extend the theme with their own color themes as well as information for ordinary users.

## Contents

<b>1 Basic usage</b>	<b>2</b>
<b>2 Package options</b>	<b>2</b>
2.1 The <code>fonts</code> option . . . . .	2
2.2 The <code>nofonts</code> option . . . . .	2
2.3 The <code>microtype</code> option . . . . .	3
2.4 The <code>nomicrotype</code> option . . . . .	3
2.5 The <code>university</code> option . . . . .	3
2.6 The <code>faculty</code> option . . . . .	3
2.7 The <code>basePath</code> option . . . . .	4
2.8 The <code>themePath</code> option . . . . .	5
2.9 The <code>logoPath</code> option . . . . .	5
2.10 The <code>logo</code> option . . . . .	5
<b>3 Logic</b>	<b>6</b>
3.1 Macros . . . . .	6
3.2 Main routine . . . . .	6
<b>4 Themes</b>	<b>8</b>
4.1 Base files . . . . .	8
4.1.1 The theme/mu/beamercolorthemefibeamer-mu.sty file . . .	8
4.1.2 The theme/mu/beamerfontthemefibeamer-mu.sty file . . .	9

4.1.3	The theme/mu/beamerinnerthemefibeamer-mu.sty file . . .	10
4.1.4	The theme/mu/beamerouterthemefibeamer-mu.sty file . . .	10
4.2	The Faculty of Informatics . . . . .	13
4.2.1	The theme/mu/beamercolorthemefibeamer-fi.sty file . . .	13
4.3	The Faculty of Science . . . . .	15
4.3.1	The theme/mu/beamercolorthemefibeamer-sci.sty file . .	15
4.4	The Faculty of Arts . . . . .	17
4.4.1	The theme/mu/beamercolorthemefibeamer-phil.sty file . .	17
4.5	The Faculty of Education . . . . .	19
4.5.1	The theme/mu/beamercolorthemefibeamer-ped.sty file . .	19
4.6	The Faculty of Social Studies . . . . .	20
4.6.1	The theme/mu/beamercolorthemefibeamer-fss.sty file . .	20
4.7	The Faculty of Law . . . . .	22
4.7.1	The theme/mu/beamercolorthemefibeamer-law.sty file . .	22
4.8	The Faculty of Economics and Administration . . . . .	24
4.8.1	The theme/mu/beamercolorthemefibeamer-econ.sty file . .	24
4.9	The Faculty of Medicine . . . . .	26
4.9.1	The theme/mu/beamercolorthemefibeamer-med.sty file . .	26
4.10	The Faculty of Sports Studies . . . . .	28
4.10.1	The theme/mu/beamercolorthemefibeamer-fsps.sty file . .	28

## 1 Basic usage

In order to use the fibeamer theme, insert `\usetheme[<options>]{fibeamer}` into the preamble of a L<sup>A</sup>T<sub>E</sub>X document that uses the beamer document class. Refer to Section 2 for the list of available *options*.

## 2 Package options

### 2.1 The fonts option

`\iffibeamer@fonts` The fonts option instructs the package to set up the combination of the font families of Carlito, Arev, Iwona, Dsfont, and DejaVu for the typesetting of text and mathematics. This option is enabled by default.

```

1 \ProvidesPackage{fbeamer/beamerthemefibeamer}[\fbeamer@version]
2 \newif\iffibeamer@fonts
3 \DeclareOptionBeamer{fonts}{\fbeamer@fontstrue}
4 \ExecuteOptionsBeamer{fonts}

```

### 2.2 The nofonts option

The nofonts option instructs the package not to alter the currently set text and mathematics font families.

```
5 \DeclareOptionBeamer{nofonts}{\fbeamer@fontsfalse}
```

### 2.3 The `microtype` option

\iffifeamer@microtype The `microtype` option instructs the package to use the microtypographic extensions of modern  $\text{\TeX}$  engines, such as  $\text{pdf}\text{\TeX}$ ,  $\text{Lua}\text{\TeX}$ , and (partially)  $\text{Xe}\text{\LaTeX}$ . This option is enabled by default.

```
6 \newif\iffifeamer@microtype  
7 \DeclareOptionBeamer{microtype}{\fifeamer@microtypetrue}  
8 \ExecuteOptionsBeamer{microtype}
```

### 2.4 The `nomicrotype` option

The `nomicrotype` option disables the microtypographic extensions. This may be necessary, if an older  $\text{\TeX}$  engine, such as  $\text{\TeX}$  or  $\varepsilon\text{-}\text{\TeX}$ , is being used.

```
9 \DeclareOptionBeamer{nomicrotype}{\fifeamer@microtypefalse}
```

\fifeamer@university 2.5 The `university` option

The `{<university=identifier>}` option pair sets the identifier of the university, at which the presentation is being written, to *identifier*. The *identifier* is stored within the `\fifeamer@university` macro, whose implicit value is `mu`. This value corresponds to the Masaryk University in Brno.

```
10 \DeclareOptionBeamer{university}{\def\fifeamer@university{\#1}}  
11 \ExecuteOptionsBeamer{university=mu}
```

\fifeamer@faculty 2.6 The `faculty` option

The `{<faculty=identifier>}` pair sets the faculty, at which the thesis is being written, to *domain*. The following faculty *identifiers* are recognized at the Masaryk University in Brno:

The faculty	The <i>domain name</i>
The Faculty of Informatics	fi
The Faculty of Science	sci
The Faculty of Law	law
The Faculty of Economics and Administration	econ
The Faculty of Social Studies	fss
The Faculty of Medicine	med
The Faculty of Education	ped
The Faculty of Arts	phil
The Faculty of Sports Studies	fssps

The *identifier* is stored within the `\fifeamer@faculty` macro, whose implicit value is `fi`.

```
12 \DeclareOptionBeamer{faculty}{\def\fifeamer@faculty{\#1}}  
13 \ExecuteOptionsBeamer{faculty=fi}
```

\fibeamer@basePath

## 2.7 The `basePath` option

The `{<basePath=`*path*`}` pair sets the *path* containing the package files. The *path* is prepended to every other path (`\fibeamer@logopath` and `\fibeamer@themePath`) used by the package. If non-empty, the *path* gets normalized to *path/*. The normalized *path* is stored within the `\fibeamer@basePath` macro, whose implicit value is `fibeamer/`.

```
14 \DeclareOptionBeamer{basePath}{%
15   \ifx\fibeamer@empty\empty% \fibeamer@empty%
16     \def\fibeamer@basePath{}%
17   \else%
18     \def\fibeamer@basePath{\#1/}%
19   \fi}
20 \ExecuteOptionsBeamer{basePath=fibeamer}
```

\fibeamer@subdir

The `\fibeamer@subdir` macro returns `/` unchanged, coerces `., . . . , /path, ./path` and `../path` to `./, . . . , /path/, ./path/` and `../path/`, respectively, and prefixes any other *path* with `\fibeamer@basePath`. This macro is used within the definition of the `themePath` and `logoPath` options.

```
21 \def\fibeamer@subdir#1#2#3#4\empty{%
22   \ifx#1\empty%           <empty> -> <basePath>
23     \fibeamer@basePath
24   \else
25     \if#1%
26       \ifx#2\empty%           / -> /
27         %
28       \else%                  /<path> -> /<path>/
29         #1#2#3#4%
30       \fi
31   \else%
32     \if#.%
33       \ifx#2\empty%           . -> ./
34         .%
35       \else
36         \if#2%
37           \ifx#3\empty%           .. -> ../
38             ..
39           \else
40             \if#3/%    ../<path> -> ../<path>/
41               ../#4/%
42             \else
43               \fibeamer@basePath#1#2#3#4%
44             \fi
45           \fi
46       \else
47         \if#2%      ./<path> -> ./<path>/
48           ./#3#4%
49       \else
50         \fibeamer@basePath#1#2#3#4%
```

```

51          \fi
52      \fi
53      \fi
54  \else
55      \fibeamer@basePath#1#2#3#4/%
56  \fi
57 \fi%
58 \fi}

```

## \fibeamer@themePath 2.8 The themePath option

The `{<themePath=path>}` pair sets the *path* containing the theme files. The *path* is normalized using the `\fibeamer@subdir` macro and stored within the `\fibeamer@stylePath` macro, whose implicit value is `\fibeamer@basepath theme/`. By default, this expands to `fibeamer/theme/`.

```

59 \DeclareOptionBeamer{themePath}{%
60   \def\fibeamer@themePath{\fibeamer@subdir#1%
61     \empty\empty\empty\empty}}
62 \ExecuteOptionsBeamer{themePath=theme}

```

## \fibeamer@logoPath 2.9 The logoPath option

The `{<logoPath=path>}` pair sets the *path* containing the logo files, which is used by the outer themes to load the faculty logos. The *path* is normalized using the `\fibeamer@subdir` macro and stored within the `\fibeamer@logoPath` macro, whose implicit value is `\fibeamer@basePath followed by logo/\fibeamer@university/`. By default, this expands to `fibeamer/logo/mu/`.

```

63 \DeclareOptionBeamer{logoPath}{%
64   \def\fibeamer@logoPath{\fibeamer@subdir#1%
65     \empty\empty\empty\empty}}
66 \ExecuteOptionsBeamer{logoPath=logo/\fibeamer@university}

```

## \fibeamer@logo 2.10 The logo option

The `{<logo=filename>}` pair sets the prefix of the filename of the logo file to be used as the faculty logo to *filename*. The *filename* is stored within the `\fibeamer@logo` macro, whose implicit value is `\fibeamer@logoPath fibreame-fibreame-university-fibreame-faculty`. By default, this expands to `fibeamer/logo/mu/fibreame-mu-fi`. The filenames of the actual files are `\fibeamer@logo-light` and `\fibeamer@logo-dark`, and correspond to the light and dark versions of the given logo.

```

67 \DeclareOptionBeamer{logo}{\def\fibeamer@logo{\#1}}
68 \ExecuteOptionsBeamer{%
69   logo=\fibeamer@logoPath fibreame-fibreame-university-fibreame-faculty}

```

## 3 Logic

### 3.1 Macros

\fibeamer@require	The <code>\fibeamer@require{&lt;package&gt;}</code> macro is used to gracefully load a <i>package</i> . Packages that have already been loaded or do not exist are ignored by the macro.
	70 \def\fibeamer@require#1{\IfFileExists{#1.sty}{% 71   \@ifpackageloaded{#1}{}{\RequirePackage{#1}}}{}}
\fibeamer@requireTheme	The <code>\fibeamer@requireTheme{&lt;class&gt;}</code> macro is used to load a <i>class</i> of beamer themes. The following packages are loaded, provided they exist:

- `beamerclassthemefibeamer` from the `\fibeamer@themePath` directory – The base theme file. By default, this expands to `fibeamer/theme/beamerclassthemefibeamer`.
- `beamerclassthemefibeamer-\fibeamer@university` from the `\fibeamer@themePath\fibeamer@university/` directory – The university theme file. By default, this expands to `fibeamer/theme/mu/beamerclassthemefibeamer-mu`.
- `beamerclassthemefibeamer-\fibeamer@university-\fibeamer@faculty` from the `\fibeamer@themePath\fibeamer@university/` directory – The faculty theme file. By default, this expands to `fibeamer/theme/mu/beamerclassthemefibeamer-mu-fi`.

```
72 \def\fibeamer@requireTheme#1{%
73   \fibeamer@require{\fibeamer@themePath beamer#1themefibeamer}
74   \fibeamer@require{\fibeamer@themePath\fibeamer@university%
75     /beamert#1themefibeamer-\fibeamer@university}
76   \fibeamer@require{\fibeamer@themePath\fibeamer@university%
77     /beamert#1themefibeamer-\fibeamer@university-\fibeamer@faculty}}
```

### 3.2 Main routine

First, the theme processes the options.

```
78 \ProcessOptionsBeamer
```

When the `microtype` option is specified, the `microtype` package gets loaded.

```
79 % Set up the microtypographic extensions
80 \iffifeamer@microtype
81   \RequirePackage{microtype}
82 \fi
```

When the `fonts` option is specified, the following packages will be used by the package to configure the fonts in the presentation mode:

- `ifthen` – This package is used to construct compound conditionals.
- `ifxetex`, `ifluatex` – These packages are used to detect the used `TEX` engine.
- `lmodern` – The Latin Modern font family is used as a fallback for missing glyphs.

- `carlito` – The Carlito font family is used as the primary text and math font face.
- `arevmath` – The Arev Sans math font family is used for various symbols and greek alphabet.
- `iwona` – The Iwona font family is used for large math symbols.
- `dejavu` – The DejaVu Sans Mono font family is used for the typesetting of monospaced text.
- `setspace` – This package is used to adjust the leading to 115 %.
- `fontenc` – This package is used to set the font encoding to Cork. This package is only used outside the X<sub>E</sub>T<sub>E</sub>X and LuaT<sub>E</sub>X engines.
- `fontspec` – This package is used to load fonts. This package is only used with the X<sub>E</sub>T<sub>E</sub>X and LuaT<sub>E</sub>X engines.

```

83 \mode
84   % Set up the fonts
85   \iffibeamer@fonts
86     \RequirePackage{ifthen}
87     \RequirePackage{ifxetex}
88     \RequirePackage{ifluatex}
89     \RequirePackage{lmodern}
90     \RequirePackage[sfdefault,lf]{carlito}
91     \renewcommand*\oldstylenums[1]{{\carlitoOsF #1}}
92
93   %% Load arev with scaling factor of .85
94   %% See <http://tex.stackexchange.com/a/181240/70941>
95   \DeclareFontFamily{OML}{zavm}{\skewchar\font=127 }
96   \DeclareFontShape{OML}{zavm}{m}{it}{<-> s*[.85] zavmri7m}{}
97   \DeclareFontShape{OML}{zavm}{b}{it}{<-> s*[.85] zavmbi7m}{}
98   \DeclareFontShape{OML}{zavm}{m}{sl}{<->ssub * zavm/m/it}{}
99   \DeclareFontShape{OML}{zavm}{bx}{it}{<->ssub * zavm/b/it}{}
100  \DeclareFontShape{OML}{zavm}{b}{sl}{<->ssub * zavm/b/it}{}
101  \DeclareFontShape{OML}{zavm}{bx}{sl}{<->ssub * zavm/b/sl}{}
102
103 \AtBeginDocument{
104   \SetSymbolFont{operators}    {normal}{OT1}{zavm}{m}{n}
105   \SetSymbolFont{letters}     {normal}{OML}{zavm}{m}{it}
106   \SetSymbolFont{symbols}     {normal}{OMS}{zavm}{m}{n}
107   \SetSymbolFont{largesymbols}{normal}{OMX}{iwona}{m}{n}
108 \RequirePackage[sans]{dsfont}
109
110 \ifthenelse{\boolean{xetex}\OR\boolean{luatex}}{
111   \RequirePackage{fontspec}
112   \setmonofont[Scale=0.85,Ligatures=TeX]{DejaVu Sans Mono}
113 }{
114   \usepackage[scaled=0.85]{DejaVuSansMono}

```

```

115      \RequirePackage[resetfonts]{cmap}
116      \RequirePackage[T1]{fontenc}
117  }
118  \RequirePackage{setspace}
119  \setstretch{1.15}
120 \fi
121 \mode
122 <all>

```

Finally, the color, font, inner and outer themes of the respective university and faculty will be loaded.

```

123 \fibeamer@requireTheme{color}
124 \fibeamer@requireTheme{font}
125 \fibeamer@requireTheme{inner}
126 \fibeamer@requireTheme{outer}

```

## 4 Themes

This section contains the combined documentation of all available themes. When creating a new theme file, it is advisable to create one self-contained `dtx` file, which is then partitioned into locale files via the `docstrip` tool based on the respective `ins` file. A macro `\file{<filename>}` is available for the sectioning of the documentation of various files within the `dtx` file. For more information about `dtx` files and the `docstrip` tool, consult the `dtx tut`, `docstrip`, `doc` and `ltxdoc` manuals.

### 4.1 Base files

#### 4.1.1 The `theme/mu/beamercolorthemefibeamer-mu.sty` file

This is the base color theme for presentations written at the Masaryk University in Brno.

```

127 \NeedsTeXFormat{LaTeX2e}
128 \ProvidesPackage{fbeamer/theme/mu/%
129   beamercolorthemefibeamer-mu}[2015/08/26]

```

`\darkframes` The `darkframes` environment switches the color definitions to render the enclosed frames in dark colors. This is a dummy definition, which will be overridden by the subsequently loaded color theme in the presentation mode.

```
130 \newenvironment{darkframes}{}{}
```

The rest of the theme will be ignored outside the presentation mode.

```
131 \mode<presentation>
```

The theme loads the following packages, which will be used by the subsequently loaded color theme specific to a faculty:

- `listings` – This package is used for code listings. The subsequently loaded color theme will specify source code coloring for the package.

- `ifthen` – This package is used to construct compound conditionals.
- `tikz` – This package is used to create gradient background for dark slides.

```
132 \RequirePackage{listings}
133 \RequirePackage{ifthen}
134 \RequirePackage{tikz}
```

`\iffibeamer@dark` The `\iffibeamer@dark` conditional will be switched on and off by the subsequently loaded color theme based on whether or not the given frame is being typeset in light or dark colors. This information will be used by outer themes to insert the correct logo into each frame.

```
135 \newif\iffibeamer@dark\fibeamer@darkfalse
```

A frame that is either title or dark, as specified by the value of the `\iffibeamer@dark` conditional, will have a gradient background. The `fibeamer@backgroundInner` and `fibeamer@backgroundOuter` colors will be defined by the subsequently loaded color theme.

```
136 \defbeamertemplate*{background canvas}{fbeamer}%
137   \ifthenelse{%
138     \boolean{fbeamer@dark} \OR \c@framenumber=0
139   }{%
140     \begin{tikzpicture}
141       \clip (0,\fbeamer@clipbottom) rectangle
142         (\paperwidth,\fbeamer@cliptop);
143       \path [inner color =fbeamer@backgroundInner,
144             outer color =fbeamer@backgroundOuter]
145         (0,0) rectangle (\paperwidth,\paperwidth);
146     \end{tikzpicture}
147   }{}}
148 \mode
149 <all>
```

#### 4.1.2 The `theme/mu/beamerfontthemefibeamer-mu.sty` file

This is the base font theme for presentations written at the Masaryk University in Brno. The theme has no effect outside the presentation mode.

```
150 \NeedsTeXFormat{LaTeX2e}
151 \ProvidesPackage{fbeamer/theme/mu/%
152   beamerfontthemefibeamer-mu}[2015/08/26]
153 \mode
154   \setbeamerfont{normal text}{size=\normalsize}
155   \setbeamerfont{title}{size=\LARGE, series=\bfseries}
156   \setbeamerfont{subtitle}{parent=normal text, size=\Large}
157   \setbeamerfont{frametitle}{size=\Large}
158   \setbeamerfont{framesubtitle}{size=\large, shape=\itshape}
159   \setbeamerfont{description item}{series=\bfseries}
160   \setbeamerfont{author}{size=\large}
161 \mode
162 <all>
```

#### 4.1.3 The theme/mu/beamerinnerthemefibeamer-mu.sty file

This is the base inner theme for presentations written at the Masaryk University in Brno. The theme has no effect outside the presentation mode.

```
163 \NeedsTeXFormat{LaTeX2e}
164 \ProvidesPackage{fibeamer/theme/mu/%
165   beamerinnerthemefibeamer-mu}[2015/08/26]
166 \defbeamertemplate*{itemize item}{fibeamer}{$\bullet$}
167 \defbeamertemplate*{itemize subitem}{fibeamer}{---}
168 \defbeamertemplate*{itemize subsubitem}{fibeamer}{\guillemotright}
169 \setbeamertemplate{bibliography item}{\insertbiblabel}
```

#### 4.1.4 The theme/mu/beamerouterthemefibeamer-mu.sty file

This is the base outer theme for presentations written at the Masaryk University in Brno. The theme has no effect outside the presentation mode.

```
170 \NeedsTeXFormat{LaTeX2e}
171 \ProvidesPackage{fibeamer/theme/mu/%
172   beamerouterthemefibeamer-mu}[2015/08/26]
173 \mode
```

The theme uses the following packages:

- `ifthen` – This package is used to construct compound conditionals.
- `ifpdf` – This package is used to check, whether the document is being typeset in DVI mode. If it is, then the `\pdfpagewidth` and `\pdfpageheight` dimensions are defined, so that positioning in TikZ works correctly.
- `tikz` – This package is used to position the logo and the frame number on a frame.
- `pgfcore` – This package is used to draw the dashed line at the title frame.

```
174 \RequirePackage{ifthen}
175 \RequirePackage{ifpdf}
176 \ifpdf\else
177   \@ifundefined{pdfpagewidth}{\newdimen\pdfpagewidth}{}%
178   \@ifundefined{pdfpageheight}{\newdimen\pdfpageheight}{}%
179   \pdfpagewidth=\paperwidth
180   \pdfpageheight=\paperheight
181 \fi
182 \RequirePackage{tikz}
183 \RequirePackage{pgfcore}
```

This part of the outer theme defines the geometry of the frames along with other dimensions.

```
184 % The logo dimensions
185 \newlength{\fibeamer@logowidth}
186 \setlength{\fibeamer@logowidth}{15mm}
187 \newlength{\fibeamer@logoheight}
```

```

188 \setlength{\fibeamer@logoheight}{1.32\fibeamer@logowidth}
189 % The logo padding
190 \newlength{\fibeamer@logopad}
191 \setlength{\fibeamer@logopad}{0.25\fibeamer@logowidth}
192 % The footer padding
193 \newlength{\fibeamer@footerpad}
194 \setlength{\fibeamer@footerpad}{\fibeamer@logopad}
195 % The side margins
196 \newlength{\fibeamer@margin}
197 \setlength{\fibeamer@margin}{\fibeamer@logopad}
198 \addtolength\fibeamer@margin{0.5\fibeamer@logowidth}
199 \setbeamersize{
200   text margin left=\fibeamer@margin,
201   text margin right=\fibeamer@margin}
202 % The upper margin
203 \newlength{\fibeamer@titleline}
204 \setlength{\fibeamer@titleline}{0.5\fibeamer@logoheight}
205 \usebeamertemplate{frametitle}%
206 \addtolength\fibeamer@titleline{-1em}
207 % The background clipping
208 \newlength{\fibeamer@clipbottom}
209 \setlength{\fibeamer@clipbottom}{\paperwidth}
210 \addtolength\fibeamer@clipbottom{-\paperheight}
211 \setlength{\fibeamer@clipbottom}{0.5\fibeamer@clipbottom}
212 \newlength{\fibeamer@cliptop}
213 \setlength{\fibeamer@cliptop}{\paperwidth}
214 \addtolength\fibeamer@cliptop{-\fibeamer@clipbottom}

The outer theme completely culls the bottom navigation.
215 \defbeamertemplate*{navigation symbols}{fibeamer}{}  

The outer theme also culls the headline and replaces it with either a dark or light
version of the faculty logo, based on the value of the \ifffbeamer@dark conditional,
which is controlled by the color theme. The light and dark logos are kept in the
\fibeamer@logo@light and \fibeamer@logo@dark saveboxes, respectively.
\fibeamer@logo@light
\fibeamer@logo@dark
216 \newsavebox\fibeamer@logo@light
217   \savebox\fibeamer@logo@light{%
218     \includegraphics[width=\fibeamer@logowidth]{\fibeamer@logo-light}}
219 \newsavebox\fibeamer@logo@dark
220   \savebox\fibeamer@logo@dark{%
221     \includegraphics[width=\fibeamer@logowidth]{\fibeamer@logo-dark}}
222
223 \defbeamertemplate*{headline}{fibeamer}{%
224   \begin{tikzpicture}[overlay,remember picture]
225     \node[anchor=north east,xshift=-\fibeamer@logopad]
226       at (current page.north east) {%
227         \ifthenelse{\boolean{fbeamer@dark}\OR\c@framenumber=0}{%
228           \usebox{\fibeamer@logo@dark}%
229         }{%
230           \usebox{\fibeamer@logo@light}%

```

```

231      }%
232      };
233  \end{tikzpicture}}
The frame title is positioned on the axis of the faculty logo.
234  \defbeamertemplate*{frametitle}{fibeamer}{%
235    \vskip\fibeamer@titleline
236    \usebeamercolor[fg]{frametitle}%
237    \usebeamerfont{frametitle}%
238    \insertframetitle\par%
239    \usebeamercolor[fg]{framesubtitle}%
240    \usebeamerfont{framesubtitle}%
241    \insertframesubtitle}
The footnote contains the frame number. It is flushed right and aligned with the
faculty logo.
242  \defbeamertemplate*{footline}{fibeamer}{%
243    \ifnum\c@framenumber=0\else%
244      \begin{tikzpicture}[overlay]
245        \node[anchor=south east,yshift=\fibeamer@footerpad,
246              xshift=-\fibeamer@footerpad] at (current page.south east) {
247          \usebeamercolor[fg]{framenumber}%
248          \usebeamerfont{framenumber}%
249          \insertframenumber/\inserttotalframenumber
250        };
251      \end{tikzpicture}
252    \fi}

```

The title frame contains the `\title` vertically positioned to the upper  $\phi^{-1}$  of the page, where  $\phi$  refers to the golden ratio, and underlined with a dashed line. At the bottom of the page, there is the `\subtitle` followed by the `\author`.

```

253  \defbeamertemplate*{title page}{fibeamer}{%
254    % This is slide 0
255    \setcounter{framenumber}{0}
256
257    % Input the title
258    \usebeamerfont{title}%
259    \usebeamercolor[fg]{title}%
260    \begin{minipage}[b][2\baselineskip][b]{\textwidth}%
261      \raggedright%
262      \inserttitle%
263    \end{minipage}
264    \vskip-.5\baselineskip
265
266    % Input the dashed line
267    \begin{pgfpicture}
268      \pgfsetlinewidth{2pt}
269      \pgfsetroundcap
270      \pgfsetdash{{0pt}{4pt}}{0cm}
271
272      \pgfpathmoveto{\pgfpoint{0mm}{0mm}}

```

```

273 \pgfpathlineto{\pgfpoint{\textwidth}{0mm}}
274   \pgfusepath{stroke}
275 \end{pgfpicture}
276 \vfill
278
279 % Input the subtitle
280 \usebeamerfont{subtitle}%
281 \begin{minipage}{\textwidth}
282   \raggedright%
283   \insertsubtitle%
284 \end{minipage}\vskip.25\baselineskip
285
286 % Input the author's name
287 \usebeamerfont{author}%
288 \begin{minipage}{\textwidth}
289   \raggedright%
290   \insertauthor%
291 \end{minipage}
292
293 \mode
294 <all>

```

## 4.2 The Faculty of Informatics

### 4.2.1 The theme/mu/beamercolorthemefibeamer-fi.sty file

This is the color theme for presentations written at the Faculty of Informatics at the Masaryk University in Brno. This theme has no effect outside the presentation mode.

```

295 \NeedsTeXFormat{LaTeX2e}
296 \ProvidesPackage{fbeamer/theme/mu/%
297   beamercolorthemefibeamer-mu-fi}[2015/08/26]
298 \mode<presentation>

```

This color theme uses the combination of yellow and dark gray in light frames and the combination of gold and white in dark frames. The `fibeamer@backgroundInner` and `fibeamer@backgroundOuter` colors are used within the background canvas template, which is defined within the color theme of the Masaryk University and which draws the gradient background of dark frames.

```

299 \definecolor{fbeamer@gold}{HTML}{a47312}
300 \definecolor{fbeamer@yellow}{HTML}{FFEB9C}
301 \definecolor{fbeamer@yellowDark}{HTML}{E9BC09}
302 \definecolor{fbeamer@gray}{HTML}{999999}
303 \colorlet{fbeamer@backgroundInner}{fbeamer@gold}
304 \colorlet{fbeamer@backgroundOuter}{fbeamer@gold!60!black}

```

The `darkframes` environment switches the `\ifffbeamer@darktrue` conditional on and sets a dark color theme.

```

305 \renewenvironment{darkframes}{%

```

```

306 \begingroup
307   \fibeamer@darktrue
308   %% Structures
309   \setbeamercolor*{structure}{fg=white, bg=fibeamer@gold}
310   \setbeamercolor*{frametitle}{fg=fibeamer@gold!25!white}
311   \setbeamercolor*{framesubtitle}{fg=white}
312   %% Text
313   \setbeamercolor*{normal text}{fg=white, bg=white}
314   %% Items
315   \setbeamercolor*{item}{fg=fibeamer@gold!25!white}
316   \setbeamercolor{footnote mark}{fg=fibeamer@gold!25!white}
317   %% Blocks
318   \setbeamercolor*{block title}{
319     use=structure, fg=white, bg=fibeamer@gold!60!white}
320   \setbeamercolor*{block title example}{
321     use=example text, fg=white, bg=fibeamer@gold!60!white}
322   \setbeamercolor*{block title alerted}{
323     use=alerted text, fg=white, bg=fibeamer@gold!90!white}
324   \setbeamercolor*{block body}{
325     fg=fibeamer@gold, use=block title,
326     bg=fibeamer@gray!15!white}
327   \usebeamercolor*{normal text}
328   %% Code listings
329   \lstset{
330     commentstyle=\color{green!25!white},
331     keywordstyle=\color{blue!25!white},
332     stringstyle=\color{fibeamer@gold!30!white}}
333   }%
334 \endgroup

```

Outside the `darkframes` environment, the light theme is used.

```

335 %% Structures
336 \setbeamercolor{structure}{fg=black!75!white, bg=white}
337 \setbeamercolor{frametitle}{fg=fibeamer@yellowDark}
338 \setbeamercolor{framesubtitle}{fg=black!60!white}
339 %% Text
340 \setbeamercolor{normal text}{fg=black!75!white}
341 %% Items
342 \setbeamercolor{item}{fg=fibeamer@yellowDark}
343 \setbeamercolor{footnote mark}{fg=fibeamer@yellowDark}
344 %% Blocks
345 \setbeamercolor{block title}{
346   use=structure, fg=black!75!white, bg=fibeamer@yellow}
347 \setbeamercolor{block title example}{
348   use=example text, fg=black!75!white, bg=fibeamer@yellow}
349 \setbeamercolor{block title alerted}{
350   use=alerted text, fg=white, bg=black!75!white}
351 \setbeamercolor{block body}{
352   fg=fibeamer@yellow, use=block title, bg=black!75!white}
353 %% Title

```

```

354 \setbeamercolor{title}{fg=white, bg=fibeamer@gold}
355 \setbeamercolor{title}{use=structure}
356 % Code listings
357 \lstset{
358   basicstyle=\footnotesize\ttfamily,
359   breakatwhitespace=false,
360   breaklines=true,
361   commentstyle=\color{green!60!black},
362   extendedchars=true,
363   keywordstyle=\color{blue},
364   showspaces=false,
365   showstringspaces=false,
366   showtabs=false,
367   stringstyle=\color{violet}}
368 \mode
369 <all>

```

## 4.3 The Faculty of Science

### 4.3.1 The theme/mu/beamercolorthemefibeamer-sci.sty file

This is the color theme for presentations written at the Faculty of Science at the Masaryk University in Brno. This theme has no effect outside the presentation mode.

```

370 \NeedsTeXFormat{LaTeX2e}
371 \ProvidesPackage{fibeamer/theme/mu/%
372   beamercolorthemefibeamer-mu-sci}[2015/08/26]
373 \mode

```

This color theme uses the combination of green, gray and white. The fibeamer@backgroundInner and fibeamer@backgroundOuter colors are used within the background canvas template, which is defined within the color theme of the Masaryk University and which draws the gradient background of dark frames.

```

374 \definecolor{fibeamer@green}{HTML}{139632}
375 \definecolor{fibeamer@gray}{HTML}{999999}
376 \colorlet{fibeamer@backgroundInner}{fibeamer@green!90!black}
377 \colorlet{fibeamer@backgroundOuter}{fibeamer@green!60!black}

```

The darkframes environment switches the \iffibeamer@darktrue conditional on and sets a dark color theme.

```

378 \renewenvironment{darkframes}%
379   \begingroup
380   \fibeamer@darktrue
381   %% Structures
382   \setbeamercolor*{structure}{fg=white, bg=fibeamer@green}
383   \setbeamercolor*{frametitle}{fg=fibeamer@green!25!white}
384   \setbeamercolor*{framesubtitle}{fg=white}
385   %% Text
386   \setbeamercolor*{normal text}{fg=white, bg=white}
387   %% Items

```

```

388     \setbeamercolor*{item}{fg=fibeamer@green!25!white}
389     \setbeamercolor{footnote mark}{fg=fibeamer@green!25!white}
390     %% Blocks
391     \setbeamercolor*{block title}{%
392         use=structure, fg=white, bg=fibeamer@green!60!white}
393     \setbeamercolor*{block title example}{%
394         use=example text, fg=white, bg=fibeamer@green!60!white}
395     \setbeamercolor*{block title alerted}{%
396         use=alerted text, fg=white, bg=fibeamer@green}
397     \setbeamercolor*{block body}{%
398         fg=fibeamer@green, use=block title,
399         bg=fibeamer@gray!15!white}
400     \usebeamercolor*{normal text}
401     % Code listings
402     \lstset{
403         commentstyle=\color{green!25!white},
404         keywordstyle=\color{blue!25!white},
405         stringstyle=\color{red!25!white}}
406     }{%
407     \endgroup}

```

Outside the darkframes environment, the light theme is used.

```

408     %% Structures
409     \setbeamercolor{structure}{fg=black!75!white, bg=white}
410     \setbeamercolor{frametitle}{fg=fibeamer@green}
411     \setbeamercolor{framesubtitle}{fg=black!75!white}
412     %% Text
413     \setbeamercolor{normal text}{fg=black}
414     %% Items
415     \setbeamercolor{item}{fg=fibeamer@green}
416     \setbeamercolor{footnote mark}{fg=fibeamer@green}
417     %% Blocks
418     \setbeamercolor{block title}{%
419         use=structure, fg=white, bg=fibeamer@green!50!white}
420     \setbeamercolor{block title example}{%
421         use=example text, fg=white, bg=fibeamer@green!50!white}
422     \setbeamercolor{block title alerted}{%
423         use=alerted text, fg=white, bg=fibeamer@green}
424     \setbeamercolor{block body}{%
425         fg=fibeamer@green, use=block title, bg=fibeamer@gray!20!white}
426     %% Title
427     \setbeamercolor{title}{fg=white, bg=fibeamer@green}
428     \setbeamercolor{title}{use=structure}
429     % Code listings
430     \lstset{
431         basicstyle=\footnotesize\ttfamily,
432         breakatwhitespace=false,
433         breaklines=true,
434         commentstyle=\color{green!60!black},
435         extendedchars=true,

```

```

436     keywordstyle=\color{blue},
437     showspaces=false,
438     showstringspaces=false,
439     showtabs=false,
440     stringstyle=\color{violet}}
441 \mode
442 <all>

```

## 4.4 The Faculty of Arts

### 4.4.1 The theme/mu/beamercolorthemefibeamer-phil.sty file

This is the color theme for presentations written at the Faculty of Arts at the Masaryk University in Brno. This theme has no effect outside the presentation mode.

```

443 \NeedsTeXFormat{LaTeX2e}
444 \ProvidesPackage{fbeamer/theme/mu/%
445   beamercolorthemefibeamer-mu-phil}[2015/08/26]
446 \mode

```

This color theme uses the combination of aquamarine, gray and white. The `fibeamer@backgroundInner` and `fibeamer@backgroundOuter` colors are used within the background canvas template, which is defined within the color theme of the Masaryk University and which draws the gradient background of dark frames.

```

447 \definecolor{fbeamer@blue}{HTML}{0071B2}
448 \definecolor{fbeamer@gray}{HTML}{999999}
449 \colorlet{fbeamer@backgroundInner}{fbeamer@blue!80!black}
450 \colorlet{fbeamer@backgroundOuter}{fbeamer@blue!60!black}

```

The `darkframes` environment switches the `\ifffbeamer@darktrue` conditional on and sets a dark color theme.

```

451 \renewenvironment{darkframes}{%
452   \begingroup
453   \fibeamer@darktrue
454   %% Structures
455   \setbeamercolor*{structure}{fg=white, bg=fibeamer@blue}
456   \setbeamercolor*{frametitle}{fg=fibeamer@blue!25!white}
457   \setbeamercolor*{framesubtitle}{fg=white}
458   %% Text
459   \setbeamercolor*{normal text}{fg=white, bg=white}
460   %% Items
461   \setbeamercolor*{item}{fg=fibeamer@blue!25!white}
462   \setbeamercolor{footnote mark}{fg=fibeamer@blue!25!white}
463   %% Blocks
464   \setbeamercolor*{block title}{
465     use=structure, fg=white, bg=fibeamer@blue!60!white}
466   \setbeamercolor*{block title example}{
467     use=example text, fg=white, bg=fibeamer@blue!60!white}
468   \setbeamercolor*{block title alerted}{
469     use=alerted text, fg=white, bg=fibeamer@blue}

```

```

470 \setbeamercolor*{block body}{  

471   fg=fibeamer@blue, use=block title,  

472   bg=fibeamer@gray!15!white}  

473 \usebeamercolor*{normal text}  

474 % Code listings  

475 \lstset{  

476   commentstyle=\color{green!25!white},  

477   keywordstyle=\color{blue!25!white},  

478   stringstyle=\color{red!25!white}}  

479 }%  

480 \endgroup}

```

Outside the darkframes environment, the light theme is used.

```

481 %% Structures  

482 \setbeamercolor{structure}{fg=black!75!white, bg=white}  

483 \setbeamercolor{frametitle}{fg=fibeamer@blue}  

484 \setbeamercolor{framesubtitle}{fg=black!75!white}  

485 %% Text  

486 \setbeamercolor{normal text}{fg=black}  

487 %% Items  

488 \setbeamercolor{item}{fg=fibeamer@blue}  

489 \setbeamercolor{footnote mark}{fg=fibeamer@blue}  

490 %% Blocks  

491 \setbeamercolor{block title}{  

492   use=structure, fg=white, bg=fibeamer@blue!50!white}  

493 \setbeamercolor{block title example}{  

494   use=example text, fg=white, bg=fibeamer@blue!50!white}  

495 \setbeamercolor{block title alerted}{  

496   use=alerted text, fg=white, bg=fibeamer@blue}  

497 \setbeamercolor{block body}{  

498   fg=fibeamer@blue, use=block title, bg=fibeamer@gray!20!white}  

499 %% Title  

500 \setbeamercolor{title}{fg=white, bg=fibeamer@blue}  

501 \setbeamercolor{title}{use=structure}  

502 % Code listings  

503 \lstset{  

504   basicstyle=\footnotesize\ttfamily,  

505   breakatwhitespace=false,  

506   breaklines=true,  

507   commentstyle=\color{green!60!black},  

508   extendedchars=true,  

509   keywordstyle=\color{blue},  

510   showspaces=false,  

511   showstringspaces=false,  

512   showtabs=false,  

513   stringstyle=\color{violet}}}  

514 \mode  

515 <all>

```

## 4.5 The Faculty of Education

### 4.5.1 The theme/mu/beamercolorthemefibeamer-ped.sty file

This is the color theme for presentations written at the Faculty of Education at the Masaryk University in Brno. This theme has no effect outside the presentation mode.

```
516 \NeedsTeXFormat{LaTeX2e}
517 \ProvidesPackage{fbeamer/theme/mu/%
518   beamercolorthemefibeamer-mu-ped}[2015/08/26]
519 \mode
```

This color theme uses the combination of orange and dark gray in light frames and the combination of gold and white in dark frames. The fbeamer@backgroundInner and fbeamer@backgroundOuter colors are used within the background canvas template, which is defined within the color theme of the Masaryk University and which draws the gradient background of dark frames.

```
520 \definecolor{fbeamer@gold}{HTML}{CF7000}
521 \definecolor{fbeamer@orange}{HTML}{FABE6E}
522 \definecolor{fbeamer@orangeDark}{HTML}{F89C22}
523 \definecolor{fbeamer@gray}{HTML}{999999}
524 \colorlet{fbeamer@backgroundInner}{fbeamer@gold}
525 \colorlet{fbeamer@backgroundOuter}{fbeamer@gold!60!black}
```

The `darkframes` environment switches the `\ifffbeamer@darktrue` conditional on and sets a dark color theme.

```
526 \renewenvironment{darkframes}{%
527   \begin{group}
528     \fubeamer@darktrue
529     %% Structures
530     \setbeamercolor*{structure}{fg=white, bg=fubeamer@gold}
531     \setbeamercolor*{frametitle}{fg=fubeamer@gold!25!white}
532     \setbeamercolor*{framesubtitle}{fg=white}
533     %% Text
534     \setbeamercolor*{normal text}{fg=white, bg=white}
535     %% Items
536     \setbeamercolor*{item}{fg=fubeamer@gold!25!white}
537     \setbeamercolor{footnote mark}{fg=fubeamer@gold!25!white}
538     %% Blocks
539     \setbeamercolor*{block title}{%
540       use=structure, fg=white, bg=fubeamer@gold!60!white}
541     \setbeamercolor*{block title example}{%
542       use=example text, fg=white, bg=fubeamer@gold!60!white}
543     \setbeamercolor*{block title alerted}{%
544       use=alerted text, fg=white, bg=fubeamer@gold!90!white}
545     \setbeamercolor*{block body}{%
546       fg=fubeamer@gold, use=block title,
547       bg=fubeamer@gray!15!white}
548     \usebeamercolor*{normal text}
549     % Code listings
```

```

550     \lstset{
551         commentstyle=\color{green!25!white},
552         keywordstyle=\color{blue!25!white},
553         stringstyle=\color{fibeamer@gold!30!white}}
554     }%
555 \endgroup

Outside the darkframes environment, the light theme is used.

556 %% Structures
557 \setbeamercolor{structure}{fg=black!75!white, bg=white}
558 \setbeamercolor{frametitle}{fg=fibeamer@orangeDark}
559 \setbeamercolor{framesubtitle}{fg=black!60!white}
560 %% Text
561 \setbeamercolor{normal text}{fg=black!75!white}
562 %% Items
563 \setbeamercolor{item}{fg=fibeamer@orangeDark}
564 \setbeamercolor{footnote mark}{fg=fibeamer@orangeDark}
565 %% Blocks
566 \setbeamercolor{block title}{%
567     use=structure, fg=black!75!white, bg=fibeamer@orange}
568 \setbeamercolor{block title example}{%
569     use=example text, fg=black!75!white, bg=fibeamer@orange}
570 \setbeamercolor{block title alerted}{%
571     use=alerted text, fg=white, bg=black!75!white}
572 \setbeamercolor{block body}{%
573     fg=fibeamer@orange, use=block title, bg=black!75!white}
574 %% Title
575 \setbeamercolor{title}{fg=white, bg=fibeamer@gold}
576 \setbeamercolor{title}{use=structure}
577 %% Code listings
578 \lstset{
579     basicstyle=\footnotesize\ttfamily,
580     breakatwhitespace=false,
581     breaklines=true,
582     commentstyle=\color{green!60!black},
583     extendedchars=true,
584     keywordstyle=\color{blue},
585     showspaces=false,
586     showstringspaces=false,
587     showtabs=false,
588     stringstyle=\color{violet}}}

589 \mode
590 <all>

```

## 4.6 The Faculty of Social Studies

### 4.6.1 The `theme/mu/beamercolorthemefibeamer-fss.sty` file

This is the color theme for presentations written at the Faculty of Social Studies at the Masaryk University in Brno. This theme has no effect outside the presentation

mode.

```
591 \NeedsTeXFormat{LaTeX2e}
592 \ProvidesPackage{fibeamer/theme/mu/%
593   beamercolorthemefibeamer-mu-fss}[2015/08/26]
594 \mode
```

This color theme uses the combination of cyan, gray and white. The `fibeamer@backgroundInner` and `fibeamer@backgroundOuter` colors are used within the background canvas template, which is defined within the color theme of the Masaryk University and which draws the gradient background of dark frames.

```
595 \definecolor{fibeamer@cyan}{HTML}{00796E}
596 \definecolor{fibeamer@gray}{HTML}{999999}
597 \colorlet{fibeamer@backgroundInner}{fibeamer@cyan!80!black}
598 \colorlet{fibeamer@backgroundOuter}{fibeamer@cyan!60!black}
```

The `darkframes` environment switches the `\iffibeamer@darktrue` conditional on and sets a dark color theme.

```
599 \renewenvironment{darkframes}{%
600   \begingroup
601     \fibeamer@darktrue
602     %% Structures
603     \setbeamercolor*{structure}{fg=white, bg=fibeamer@cyan}
604     \setbeamercolor*{frametitle}{fg=fibeamer@cyan!25!white}
605     \setbeamercolor*{framesubtitle}{fg=white}
606     %% Text
607     \setbeamercolor*{normal text}{fg=white, bg=white}
608     %% Items
609     \setbeamercolor*{item}{fg=fibeamer@cyan!25!white}
610     \setbeamercolor{footnote mark}{fg=fibeamer@cyan!25!white}
611     %% Blocks
612     \setbeamercolor*{block title}{%
613       use=structure, fg=white, bg=fibeamer@cyan!60!white}
614     \setbeamercolor*{block title example}{%
615       use=example text, fg=white, bg=fibeamer@cyan!60!white}
616     \setbeamercolor*{block title alerted}{%
617       use=alerted text, fg=white, bg=fibeamer@cyan}
618     \setbeamercolor*{block body}{%
619       fg=fibeamer@cyan, use=block title,
620       bg=fibeamer@gray!15!white}
621     \usebeamercolor*{normal text}
622     %% Code listings
623     \lstset{
624       commentstyle=\color{green!25!white},
625       keywordstyle=\color{blue!25!white},
626       stringstyle=\color{red!25!white}}
627     }{%
628   \endgroup}
```

Outside the `darkframes` environment, the light theme is used.

```
629 %% Structures
```

```

630 \setbeamercolor{structure}{fg=black!75!white, bg=white}
631 \setbeamercolor{frametitle}{fg=fibeamer@cyan}
632 \setbeamercolor{framesubtitle}{fg=black!75!white}
633 %% Text
634 \setbeamercolor{normal text}{fg=black}
635 %% Items
636 \setbeamercolor{item}{fg=fibeamer@cyan}
637 \setbeamercolor{footnote mark}{fg=fibeamer@cyan}
638 %% Blocks
639 \setbeamercolor{block title}{
  use=structure, fg=white, bg=fibeamer@cyan!50!white}
640 \setbeamercolor{block title example} {
  use=example text, fg=white, bg=fibeamer@cyan!50!white}
641 \setbeamercolor{block title alerted} {
  use=alerted text, fg=white, bg=fibeamer@cyan}
642 \setbeamercolor{block body} {
  fg=fibeamer@cyan, use=block title, bg=fibeamer@gray!20!white}
643 %% Title
644 \setbeamercolor{title}{fg=white, bg=fibeamer@cyan}
645 \setbeamercolor{title}{use=structure}
646 % Code listings
647 \lstset{
  basicstyle=\footnotesize\ttfamily,
  breakatwhitespace=false,
  breaklines=true,
  commentstyle=\color{green!60!black},
  extendedchars=true,
  keywordstyle=\color{blue},
  showspaces=false,
  showstringspaces=false,
  showtabs=false,
  stringstyle=\color{violet}}
648 \mode
649 <all>

```

## 4.7 The Faculty of Law

### 4.7.1 The theme/mu/beamercolorthemefibeamer-law.sty file

This is the color theme for presentations written at the Faculty of Law at the Masaryk University in Brno. This theme has no effect outside the presentation mode.

```

664 \NeedsTeXFormat{LaTeX2e}
665 \ProvidesPackage{fibeamer/theme/mu/%
666   beamercolorthemefibeamer-mu-law}[2015/08/26]
667 \mode<presentation>

```

This color theme uses the combination of violet, gray and white. The `fibeamer@backgroundInner` and `fibeamer@backgroundOuter` colors are used within the background canvas template, which is defined within the color theme of the Masaryk

University and which draws the gradient background of dark frames.

```
668 \definecolor{fibeamer@violet}{HTML}{660099}
669 \definecolor{fibeamer@gray}{HTML}{999999}
670 \colorlet{fibeamer@backgroundInner}{fibeamer@violet}
671 \colorlet{fibeamer@backgroundOuter}{fibeamer@violet!60!black}
```

The `darkframes` environment switches the `\iffibeamer@darktrue` conditional on and sets a dark color theme.

```
672 \renewenvironment{darkframes}{%
673   \begingroup
674     \fibeamer@darktrue
675     %% Structures
676     \setbeamercolor*{structure}{fg=white, bg=fibeamer@violet}
677     \setbeamercolor*{frametitle}{fg=fibeamer@violet!25!white}
678     \setbeamercolor*{framesubtitle}{fg=white}
679     %% Text
680     \setbeamercolor*{normal text}{fg=white, bg=white}
681     %% Items
682     \setbeamercolor*{item}{fg=fibeamer@violet!25!white}
683     \setbeamercolor{footnote mark}{fg=fibeamer@violet!25!white}
684     %% Blocks
685     \setbeamercolor*{block title}{%
686       use=structure, fg=white, bg=fibeamer@violet!60!white}
687     \setbeamercolor*{block title example}{%
688       use=example text, fg=white, bg=fibeamer@violet!60!white}
689     \setbeamercolor*{block title alerted}{%
690       use=alerted text, fg=white, bg=fibeamer@violet!90!white}
691     \setbeamercolor*{block body}{%
692       fg=fibeamer@violet, use=block title,
693       bg=fibeamer@gray!15!white}
694     \usebeamercolor*{normal text}
695     % Code listings
696     \lstset{
697       commentstyle=\color{green!25!white},
698       keywordstyle=\color{blue!25!white},
699       stringstyle=\color{fibeamer@violet!25!white}}
700   }%
701 }
```

Outside the `darkframes` environment, the light theme is used.

```
702 %% Structures
703 \setbeamercolor{structure}{fg=black!75!white, bg=white}
704 \setbeamercolor{frametitle}{fg=fibeamer@violet}
705 \setbeamercolor{framesubtitle}{fg=black!75!white}
706 %% Text
707 \setbeamercolor{normal text}{fg=black}
708 %% Items
709 \setbeamercolor{item}{fg=fibeamer@violet}
710 \setbeamercolor{footnote mark}{fg=fibeamer@violet}
711 %% Blocks
```

```

712 \setbeamercolor{block title}{%
713   use=structure, fg=white, bg=fibeamer@violet!50!white}
714 \setbeamercolor{block title example}{%
715   use=example text, fg=white, bg=fibeamer@violet!50!white}
716 \setbeamercolor{block title alerted}{%
717   use=alerted text, fg=white, bg=fibeamer@violet}
718 \setbeamercolor{block body}{%
719   fg=fibeamer@violet, use=block title, bg=fibeamer@gray!20!white}
720 % Title
721 \setbeamercolor{title}{fg=white, bg=fibeamer@violet}
722 \setbeamercolor{title}{use=structure}
723 % Code listings
724 \lstset{
725   basicstyle=\footnotesize\ttfamily,
726   breakatwhitespace=false,
727   breaklines=true,
728   commentstyle=\color{green!60!black},
729   extendedchars=true,
730   keywordstyle=\color{blue},
731   showspaces=false,
732   showstringspaces=false,
733   showtabs=false,
734   stringstyle=\color{violet}}
735 \mode
736 <all>

```

## 4.8 The Faculty of Economics and Administration

### 4.8.1 The theme/mu/beamercolorthemefibeamer-econ.sty file

This is the color theme for presentations written at the Faculty of Economics and Administration at the Masaryk University in Brno. This theme has no effect outside the presentation mode.

```

737 \NeedsTeXFormat{LaTeX2e}
738 \ProvidesPackage{fibeamer/theme/mu/%
739   beamercolorthemefibeamer-mu-econ}[2015/08/26]
740 \mode<presentation>

```

This color theme uses the combination of red-brown, gray and white. The fibeamer@backgroundInner and fibeamer@backgroundOuter colors are used within the background canvas template, which is defined within the color theme of the Masaryk University and which draws the gradient background of dark frames.

```

741 \definecolor{fibeamer@brown}{HTML}{6e222c}
742 \definecolor{fibeamer@gray}{HTML}{999999}
743 \colorlet{fibeamer@backgroundInner}{fibeamer@brown}
744 \colorlet{fibeamer@backgroundOuter}{fibeamer@brown!60!black}

```

The darkframes environment switches the \iffibeamer@darktrue conditional on and sets a dark color theme.

```

745 \renewenvironment{darkframes}{%

```

```

746 \begingroup
747   \fibeamer@darktrue
748   %% Structures
749   \setbeamercolor*{structure}{fg=white, bg=fibeamer@brown}
750   \setbeamercolor*{frametitle}{fg=fibeamer@brown!25!white}
751   \setbeamercolor*{framesubtitle}{fg=white}
752   %% Text
753   \setbeamercolor*{normal text}{fg=white, bg=white}
754   %% Items
755   \setbeamercolor*{item}{fg=fibeamer@brown!25!white}
756   \setbeamercolor{footnote mark}{fg=fibeamer@brown!25!white}
757   %% Blocks
758   \setbeamercolor*{block title}{
759     use=structure, fg=white, bg=fibeamer@brown!60!white}
760   \setbeamercolor*{block title example}{
761     use=example text, fg=white, bg=fibeamer@brown!60!white}
762   \setbeamercolor*{block title alerted}{
763     use=alerted text, fg=white, bg=fibeamer@brown!90!white}
764   \setbeamercolor*{block body}{
765     fg=fibeamer@brown, use=block title,
766     bg=fibeamer@gray!15!white}
767   \usebeamercolor*{normal text}
768   %% Code listings
769   \lstset{
770     commentstyle=\color{green!25!white},
771     keywordstyle=\color{blue!25!white},
772     stringstyle=\color{fibeamer@brown!25!white}}
773   }%
774 \endgroup

```

Outside the `darkframes` environment, the light theme is used.

```

775 %% Structures
776 \setbeamercolor{structure}{fg=black!75!white, bg=white}
777 \setbeamercolor{frametitle}{fg=fibeamer@brown}
778 \setbeamercolor{framesubtitle}{fg=black!75!white}
779 %% Text
780 \setbeamercolor{normal text}{fg=black}
781 %% Items
782 \setbeamercolor{item}{fg=fibeamer@brown}
783 \setbeamercolor{footnote mark}{fg=fibeamer@brown}
784 %% Blocks
785 \setbeamercolor{block title}{
786   use=structure, fg=white, bg=fibeamer@brown!50!white}
787 \setbeamercolor{block title example}{
788   use=example text, fg=white, bg=fibeamer@brown!50!white}
789 \setbeamercolor{block title alerted}{
790   use=alerted text, fg=white, bg=fibeamer@brown}
791 \setbeamercolor{block body}{
792   fg=fibeamer@brown, use=block title, bg=fibeamer@gray!20!white}
793 %% Title

```

```

794 \setbeamercolor{title}{fg=white, bg=fibeamer@brown}
795 \setbeamercolor{title}{use=structure}
796 % Code listings
797 \lstset{
798   basicstyle=\footnotesize\ttfamily,
799   breakatwhitespace=false,
800   breaklines=true,
801   commentstyle=\color{green!60!black},
802   extendedchars=true,
803   keywordstyle=\color{blue},
804   showspaces=false,
805   showstringspaces=false,
806   showtabs=false,
807   stringstyle=\color{violet}}
808 \mode
809 <all>

```

## 4.9 The Faculty of Medicine

### 4.9.1 The theme/mu/beamercolorthemefibeamer-med.sty file

This is the color theme for presentations written at the Faculty of Medicine at the Masaryk University in Brno. This theme has no effect outside the presentation mode.

```

810 \NeedsTeXFormat{LaTeX2e}
811 \ProvidesPackage{fibeamer/theme/mu/%
812   beamercolorthemefibeamer-mu-med}[2015/08/26]
813 \mode

```

This color theme uses the combination of red, gray and white. The fibeamer@backgroundInner and fibeamer@backgroundOuter colors are used within the background canvas template, which is defined within the color theme of the Masaryk University and which draws the gradient background of dark frames.

```

814 \definecolor{fibeamer@red}{HTML}{c82600}
815 \definecolor{fibeamer@gray}{HTML}{999999}
816 \colorlet{fibeamer@backgroundInner}{fibeamer@red}
817 \colorlet{fibeamer@backgroundOuter}{fibeamer@red!60!black}

```

The darkframes environment switches the \iffibeamer@darktrue conditional on and sets a dark color theme.

```

818 \renewenvironment{darkframes}%
819   \begingroup
820     \fibeamer@darktrue
821     %% Structures
822     \setbeamercolor*{structure}{fg=white, bg=fibeamer@red}
823     \setbeamercolor*{frametitle}{fg=fibeamer@red!25!white}
824     \setbeamercolor*{framesubtitle}{fg=white}
825     %% Text
826     \setbeamercolor*{normal text}{fg=white, bg=white}
827     %% Items

```

```

828 \setbeamercolor*{item}{fg=fibeamer@red!25!white}
829 \setbeamercolor{footnote mark}{fg=fibeamer@red!25!white}
830 %% Blocks
831 \setbeamercolor*{block title}{%
832   use=structure, fg=white, bg=fibeamer@red!60!white}
833 \setbeamercolor*{block title example}{%
834   use=example text, fg=white, bg=fibeamer@red!60!white}
835 \setbeamercolor*{block title alerted}{%
836   use=alerted text, fg=white, bg=fibeamer@red!90!white}
837 \setbeamercolor*{block body}{%
838   fg=fibeamer@red, use=block title,
839   bg=fibeamer@gray!15!white}
840 \usebeamercolor*{normal text}
841 % Code listings
842 \lstset{
843   commentstyle=\color{green!25!white},
844   keywordstyle=\color{blue!25!white},
845   stringstyle=\color{fibeamer@red!25!white}}
846 }{%
847 \endgroup}

```

Outside the darkframes environment, the light theme is used.

```

848 %% Structures
849 \setbeamercolor{structure}{fg=black!75!white, bg=white}
850 \setbeamercolor{frametitle}{fg=fibeamer@red}
851 \setbeamercolor{framesubtitle}{fg=black!75!white}
852 %% Text
853 \setbeamercolor{normal text}{fg=black}
854 %% Items
855 \setbeamercolor{item}{fg=fibeamer@red}
856 \setbeamercolor{footnote mark}{fg=fibeamer@red}
857 %% Blocks
858 \setbeamercolor{block title}{%
859   use=structure, fg=white, bg=fibeamer@red!50!white}
860 \setbeamercolor{block title example}{%
861   use=example text, fg=white, bg=fibeamer@red!50!white}
862 \setbeamercolor{block title alerted}{%
863   use=alerted text, fg=white, bg=fibeamer@red}
864 \setbeamercolor{block body}{%
865   fg=fibeamer@red, use=block title, bg=fibeamer@gray!20!white}
866 %% Title
867 \setbeamercolor{title}{fg=white, bg=fibeamer@red}
868 \setbeamercolor{title}{use=structure}
869 % Code listings
870 \lstset{
871   basicstyle=\footnotesize\ttfamily,
872   breakatwhitespace=false,
873   breaklines=true,
874   commentstyle=\color{green!60!black},
875   extendedchars=true,

```

```

876     keywordstyle=\color{blue},
877     showspaces=false,
878     showstringspaces=false,
879     showtabs=false,
880     stringstyle=\color{violet}}
881 \mode
882 <all>

```

## 4.10 The Faculty of Sports Studies

### 4.10.1 The theme/mu/beamercolorthemefibeamer-fsps.sty file

This is the color theme for presentations written at the Faculty of Sports Studies at the Masaryk University in Brno. This theme has no effect outside the presentation mode.

```

883 \NeedsTeXFormat{LaTeX2e}
884 \ProvidesPackage{fibeamer/theme/mu/%
885   beamercolorthemefibeamer-mu-fsps}[2015/08/26]
886 \mode

```

This color theme uses the combination of dark blue, gray and white. The fibeamer@backgroundInner and fibeamer@backgroundOuter colors are used within the background canvas template, which is defined within the color theme of the Masaryk University and which draws the gradient background of dark frames.

```

887 \definecolor{fibeamer@blue}{HTML}{1B458F}
888 \definecolor{fibeamer@gray}{HTML}{999999}
889 \colorlet{fibeamer@backgroundInner}{fibeamer@blue}
890 \colorlet{fibeamer@backgroundOuter}{fibeamer@blue!60!black}

```

The darkframes environment switches the \iffibeamer@darktrue conditional on and sets a dark color theme.

```

891 \renewenvironment{darkframes}{%
892   \begingroup
893   \fibeamer@darktrue
894   %% Structures
895   \setbeamercolor*{structure}{fg=white, bg=fibeamer@blue}
896   \setbeamercolor*{frametitle}{fg=fibeamer@blue!25!white}
897   \setbeamercolor*{framesubtitle}{fg=white}
898   %% Text
899   \setbeamercolor*{normal text}{fg=white, bg=white}
900   %% Items
901   \setbeamercolor*{item}{fg=fibeamer@blue!25!white}
902   \setbeamercolor{footnote mark}{fg=fibeamer@blue!25!white}
903   %% Blocks
904   \setbeamercolor*{block title}{
905     use=structure, fg=white, bg=fibeamer@blue!60!white}
906   \setbeamercolor*{block title example}{
907     use=example text, fg=white, bg=fibeamer@blue!60!white}
908   \setbeamercolor*{block title alerted}{
909     use=alerted text, fg=white, bg=fibeamer@blue!95!white}

```

```

910      \setbeamercolor*{block body}{  

911          fg=fibeamer@blue, use=block title,  

912          bg=fibeamer@gray!15!white}  

913      \usebeamercolor*{normal text}  

914      % Code listings  

915      \lstset{  

916          commentstyle=\color{green!25!white},  

917          keywordstyle=\color{blue!25!white},  

918          stringstyle=\color{red!25!white}}  

919      }%  

920  \endgroup}

```

Outside the `darkframes` environment, the light theme is used.

```

921  %% Structures  

922  \setbeamercolor{structure}{fg=black!75!white, bg=white}  

923  \setbeamercolor{frametitle}{fg=fibeamer@blue}  

924  \setbeamercolor{framesubtitle}{fg=black!75!white}  

925  %% Text  

926  \setbeamercolor{normal text}{fg=black}  

927  %% Items  

928  \setbeamercolor{item}{fg=fibeamer@blue}  

929  \setbeamercolor{footnote mark}{fg=fibeamer@blue}  

930  %% Blocks  

931  \setbeamercolor{block title}{  

932      use=structure, fg=white, bg=fibeamer@blue!50!white}  

933  \setbeamercolor{block title example}{  

934      use=example text, fg=white, bg=fibeamer@blue!50!white}  

935  \setbeamercolor{block title alerted}{  

936      use=alerted text, fg=white, bg=fibeamer@blue}  

937  \setbeamercolor{block body}{  

938      fg=fibeamer@blue, use=block title, bg=fibeamer@gray!20!white}  

939  %% Title  

940  \setbeamercolor{title}{fg=white, bg=fibeamer@blue}  

941  \setbeamercolor{title}{use=structure}  

942  % Code listings  

943  \lstset{  

944      basicstyle=\footnotesize\ttfamily,  

945      breakatwhitespace=false,  

946      breaklines=true,  

947      commentstyle=\color{green!60!black},  

948      extendedchars=true,  

949      keywordstyle=\color{blue},  

950      showspaces=false,  

951      showstringspaces=false,  

952      showtabs=false,  

953      stringstyle=\color{violet}}}  

954 \mode  

955 <all>

```

# Index

Numbers written in italic refer to the page where the corresponding entry is described; numbers underlined refer to the code line of the definition; numbers in roman refer to the code lines where the entry is used.

Symbols	
\-	167
\@ifpackageloaded	71
\@ifundefined	177, 178
<b>A</b>	
\addtolength	198, 206, 210, 214
\AtBeginDocument	103
<b>B</b>	
\baselineskip	260, 264, 284
\begin ...	140, 224, 244, 260, 267, 281, 288
\begingroup	306, 379, 452, 527, 600, 673, 746, 819, 892
\bfseries	155, 159
\boolean	110, 138, 227
\bullet	166
<b>C</b>	
\c@framenumber	138, 227, 243
\carlito0sF	91
\clip	141
\color	330, 331, 332, 361, 363, 367, 403, 404, 405, 434, 436, 440, 476, 477, 478, 507, 509, 513, 551, 552, 553, 582, 584, 588, 624, 625, 626, 655, 657, 661, 697, 698, 699, 728, 730, 734, 770, 771, 772, 801, 803, 807, 843, 844, 845, 874, 876, 880, 916, 917, 918, 947, 949, 953
\colorlet	303, 304, 376, 377, 449, 450, 524, 525, 597, 598, 670, 671, 743, 744, 816, 817, 889, 890
<b>D</b>	
\darkframes	130
\DeclareFontFamily	95
\DeclareFontShape	96, 97, 98, 99, 100, 101
\DeclareOptionBeamer	..... 3, 5, 7, 9, 10, 12, 14, 59, 63, 67
\def ...	10, 12, 16, 18, 21, 60, 64, 67, 70, 72
\defbeamertemplate	136, 166, 167, 168, 215, 223, 234, 242, 253
\definecolor	299, 300, 301, 302, 374, 375, 447, 448, 520, 521, 522, 523, 595, 596, 668, 669, 741, 742, 814, 815, 887, 888
<b>E</b>	
\else	17, 24, 28, 31, 35, 39, 42, 46, 49, 54, 176, 243
\empty	21, 22, 26, 33, 37, 61, 65
\end ....	146, 233, 251, 263, 276, 284, 291
\endgroup	334, 407, 480, 555, 628, 701, 774, 847, 920
\ExecuteOptionsBeamer	..... 4, 8, 11, 13, 20, 62, 66, 68
<b>F</b>	
\fi	19, 30, 44, 45, 51, 52, 53, 56, 57, 58, 82, 120, 181, 252
\fibeamer@basePath	14, 23, 43, 50, 55
\fibeamer@clipbottom	..... 141, 208, 209, 210, 211, 214
\fibeamer@cliptop	142, 212, 213, 214
\fibeamer@darkfalse	135
\fibeamer@darktrue	307, 380, 453, 528, 601, 674, 747, 820, 893
\fibeamer@empty	15
\fibeamer@faculty	12, 69, 77
\fibeamer@fontsfalse	5
\fibeamer@fontstrue	3
\fibeamer@footerpad	193, 194, 245, 246
\fibeamer@logo	67, 218, 221
\fibeamer@logo@dark	11, 219, 220, 228
\fibeamer@logo@light	11, 216, 217, 230
\fibeamer@logoheight	187, 188, 204
\fibeamer@logopad	190, 191, 194, 197, 225
\fibeamer@logopath	..... 63, 69
\fibeamer@logowidth	... 185, 186, 188, 191, 198, 218, 221
\fibeamer@margin	196, 197, 198, 200, 201
\fibeamer@microtypetfalse	9
\fibeamer@microtypetrue	7
\fibeamer@require	70, 73, 74, 76
\fibeamer@requireTheme	..... 72, 123, 124, 125, 126

\fibeamer@subdir .....	21, 60, 64
\fibeamer@themePath .....	59, 73, 74, 76
\fibeamer@titleline ..	203, 204, 206, 235
\fibeamer@university .....	10, 66, 69, 74, 75, 76, 77
\fibeamer@version .....	1
\file .....	7
\font .....	95
\footnotesize .....	358, 431, 504, 579, 652, 725, 798, 871, 944
<b>G</b>	
\guillemotright .....	168
<b>I</b>	
\if .....	25, 32, 36, 40, 47
\iffibeamer@dark .....	135
\iffibeamer@fonts .....	1, 85
\iffibeamer@microtype .....	6, 80
\IffFileExists .....	70
\ifnum .....	243
\ifpdf .....	176
\ifthenelse .....	110, 137, 227
\ifx .....	15, 22, 26, 33, 37
\includegraphics .....	218, 221
\insertauthor .....	290
\insertbiblabel .....	169
\insertframenumber .....	249
\insertframesubtitle .....	241
\insertframetitle .....	238
\insertsubtitle .....	283
\inserttitle .....	262
\inserttotalframenumber .....	249
\itshape .....	158
<b>L</b>	
\LARGE .....	155
\Large .....	156, 157
\large .....	158, 160
\lstset .....	329, 357, 402, 430, 475, 503, 550, 578, 623, 651, 696, 724, 769, 797, 842, 870, 915, 943
<b>M</b>	
\mode .....	83, 121, 131, 148, 153, 161, 173, 293, 298, 368, 373, 441, 446, 514, 519, 589, 594, 662, 667, 735, 740, 808, 813, 881, 886, 954
<b>N</b>	
\NeedsTeXFormat .....	127, 150, 163, 170, 295, 370, 443, 516, 591, 664, 737, 810, 883
\newdimen .....	177, 178
\newenvironment .....	130
\newif .....	2, 6, 135
\newlength .....	185, 187, 190, 193, 196, 203, 208, 212
\newsavebox .....	216, 219
\node .....	225, 245
\normalsize .....	154
<b>O</b>	
\oldstylenums .....	91
\OR .....	110, 138, 227
<b>P</b>	
\paperheight .....	180, 210
\paperwidth .....	142, 145, 179, 209, 213
\par .....	238
\path .....	143
\pdfpageheight .....	178, 180
\pdfpagewidth .....	177, 179
\pgfpathlineto .....	273
\pgfpathmoveto .....	272
\pgfpoint .....	272, 273
\pgfsetdash .....	270
\pgfsetlinewidth .....	268
\pgfsetroundcap .....	269
\pgfusepath .....	275
\ProcessOptionsBeamer .....	78
\ProvidesPackage .....	1, 128, 151, 164, 171, 296, 371, 444, 517, 592, 665, 738, 811, 884
<b>R</b>	
\raggedright .....	261, 282, 289
\renewcommand .....	91
\renewenvironment .....	305, 378, 451, 526, 599, 672, 745, 818, 891
\RequirePackage .....	71, 81, 86, 87, 88, 89, 90, 108, 111, 115, 116, 118, 132, 133, 134, 174, 175, 182, 183
<b>S</b>	
\savebox .....	217, 220
\setbeamercolor .....	309, 310, 311, 313, 315, 316, 318, 320, 322, 324, 336, 337, 338, 340, 342, 343, 345, 347, 349, 351, 354, 355,

382, 383, 384, 386, 388, 389, 391,	
393, 395, 397, 409, 410, 411, 413,	
415, 416, 418, 420, 422, 424, 427,	
428, 455, 456, 457, 459, 461, 462,	
464, 466, 468, 470, 482, 483, 484,	
486, 488, 489, 491, 493, 495, 497,	
500, 501, 530, 531, 532, 534, 536,	
537, 539, 541, 543, 545, 557, 558,	
559, 561, 563, 564, 566, 568, 570,	
572, 575, 576, 603, 604, 605, 607,	
609, 610, 612, 614, 616, 618, 630,	
631, 632, 634, 636, 637, 639, 641,	
643, 645, 648, 649, 676, 677, 678,	
680, 682, 683, 685, 687, 689, 691,	
703, 704, 705, 707, 709, 710, 712,	
714, 716, 718, 721, 722, 749, 750,	
751, 753, 755, 756, 758, 760, 762,	
764, 776, 777, 778, 780, 782, 783,	
785, 787, 789, 791, 794, 795, 822,	
823, 824, 826, 828, 829, 831, 833,	
835, 837, 849, 850, 851, 853, 855,	
856, 858, 860, 862, 864, 867, 868,	
895, 896, 897, 899, 901, 902, 904,	
906, 908, 910, 922, 923, 924, 926,	
928, 929, 931, 933, 935, 937, 940, 941	
\setbeamertfont . . . . .	
	... 154, 155, 156, 157, 158, 159, 160
	\setbeamersize . . . . . 199
	\setbeamertemplate . . . . . 169
	\setcounter . . . . . 255
	\setlength . . . . . 186, 188, 191, 194, 197, 204, 209, 211, 213
	\setmonofont . . . . . 112
	\setstretch . . . . . 119
	\SetSymbolFont . . . . . 104, 105, 106, 107
	\skewchar . . . . . 95
	<b>T</b>
	\textwidth . . . . . 260, 273, 281, 288
	\ttfamily . . . . . 358, 431, 504, 579, 652, 725, 798, 871, 944
	<b>U</b>
	\usebeamercolor 236, 239, 247, 259, 327, 400, 473, 548, 621, 694, 767, 840, 913
	\usebeamertemplate . . . . .
	... 205, 237, 240, 248, 258, 280, 287
	\usebox . . . . . 228, 230
	\usepackage . . . . . 114
	<b>V</b>
	\vfill . . . . . 277
	\vskip . . . . . 235, 264, 284

## Change History

v1.0.1

General: Added DVI output support. [VN] . . . . . 10

v1.0.2

General: Added the opt-out microtype option. [VN] . . . . . 2

v1.0.3

General: The example documents

from the example directory and

the user guide from the guide directory are now a part of the CTAN archive. [VN] . . . . . 1

v1.0.4

General: Updated the user guide.  
[VN] . . . . . 1