

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

Vít Novotný

October 3, 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>university</code> option . . . . .	3
2.4 The <code>faculty</code> option . . . . .	3
2.5 The <code>themePath</code> option . . . . .	4
2.6 The <code>logoPath</code> option . . . . .	5
2.7 The <code>logo</code> option . . . . .	5
<b>3 Logic</b>	<b>5</b>
3.1 Macros . . . . .	5
3.2 Main routine . . . . .	6
<b>4 Themes</b>	<b>7</b>
4.1 Base files . . . . .	8
4.1.1 The theme/ <code>mu/beamercolorthemefibeamer-mu.sty</code> file . . . . .	8
4.1.2 The theme/ <code>mu/beamerfontthemefibeamer-mu.sty</code> file . . . . .	9
4.1.3 The theme/ <code>mu/beamerinnerthemefibeamer-mu.sty</code> file . . . . .	9
4.1.4 The theme/ <code>mu/beamerouterthemefibeamer-mu.sty</code> file . . . . .	9
4.2 The Faculty of Informatics . . . . .	12

4.2.1	The theme/mu/beamercolorthemefibeamer-fi.sty file . . .	12
4.3	The Faculty of Science . . . . .	14
4.3.1	The theme/mu/beamercolorthemefibeamer-sci.sty file . .	14
4.4	The Faculty of Arts . . . . .	16
4.4.1	The theme/mu/beamercolorthemefibeamer-phil.sty . .	16
4.5	The Faculty of Education . . . . .	18
4.5.1	The theme/mu/beamercolorthemefibeamer-ped.sty file .	18
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 . . . . .	25
4.9.1	The theme/mu/beamercolorthemefibeamer-med.sty file .	25
4.10	The Faculty of Sports Studies . . . . .	27
4.10.1	The theme/mu/beamercolorthemefibeamer-fsp.s.sty file .	27

## 1 Basic usage

In order to use the fibeamer theme, insert `\usetheme[⟨options⟩]{fibeamer}` into the preamble of a `LATEX` 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 Sans Mono for the typesetting of roman, italic or monospaced text and mathematics. This option is enabled by default.

```

1 \ProvidesPackage{fibeamer/beamerthemefibeamer}[\fibeamer@version]
2 \newif\iffibeamer@fonts
3 \DeclareOptionBeamer{fonts}{\fibeamer@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}{\fibeamer@fontsfalse}
```

\fibeamer@university

## 2.3 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 `\fibeamer@university` macro, whose implicit value is `mu`. This value corresponds to the Masaryk University in Brno.

```
6 \DeclareOptionBeamer{university}{\def\fibeamer@university{\#1}}
7 \ExecuteOptionsBeamer{university=mu}
```

\fibeamer@faculty

## 2.4 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</i> name
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	fsps

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

```
8 \DeclareOptionBeamer{faculty}{\def\fibeamer@faculty{\#1}}
9 \ExecuteOptionsBeamer{faculty=fi}
```

\fibeamer@basePath

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/`.

```
10 \DeclareOptionBeamer{basePath}{%
11   \ifx\fibeamer@empty\empty\fibeamer@empty%
12   \def\fibeamer@basePath{}%
13 \else%
14   \def\fibeamer@basePath{\#1/}%
15 \fi}
16 \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.

```

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

```

## \fibeamer@themePath 2.5 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/`.

```
55 \DeclareOptionBeamer{themePath}{%
```

```
56 \def\fibeamer@themePath{\fibeamer@subdir#1%  
57   \empty\empty\empty\empty}}}  
58 \ExecuteOptionsBeamer{themePath=theme}
```

\fibeamer@logoPath 2.6 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/`.

```
59 \DeclareOptionBeamer{logoPath}{%
60   \def\fibeamer@logoPath{\fibeamer@subdir#1%
61     \empty\empty\empty\empty}}
62 \ExecuteOptionsBeamer{logoPath=logo/\fibeamer@university}
```

\fibeamer@logo 2.7 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 fibeamer-\fibeamer@university-\fibeamer@faculty`. By default, this expands to `fibeamer/logo/mu/fibeamer-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.

```
63 \DeclareOptionBeamer{logo}{\def\fibeamer@logo{\#1}}
64 \ExecuteOptionsBeamer{%
65   logo=\fibeamer@logoPath \fibeamer-\fibeamer@university-\fibeamer@faculty}
```

3 Logic

### 3.1 Macros

\fibeamer@require The `\fibeamer@require{<package>}` macro is used to gracefully load a *package*. Packages that have already been loaded or do not exist are ignored by the macro.

```
66 \def\fibeamer@require{\IfFileExists{#1.sty}{%
67   \gifpackage{#1}{}{\RequirePackage{#1}}}{}}
```

\fibeamer@requireTheme The \fibeamer@requireTheme{<class>} macro is used to load a *class* 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.`

```

68 \def\fibeamer@requireTheme#1{%
69   \fibeamer@require{\fibeamer@themePath beamer#1themefibeamer}%
70   \fibeamer@require{\fibeamer@themePath\fibeamer@university%%
71     /beamer#1themefibeamer-\fibeamer@university}%
72   \fibeamer@require{\fibeamer@themePath\fibeamer@university%%
73     /beamer#1themefibeamer-\fibeamer@university-\fibeamer@faculty}}%

```

## 3.2 Main routine

First, the theme processes the options.

```
74 \ProcessOptionsBeamer
```

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  $\text{\TeX}$  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 math font family is used for various symbols and greek alphabet.
- `iwona` – The Iwona font family is used for large mathAsymbols.
- `DejaVuSansMono` – 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  $\text{X}\text{\TeX}$  and  $\text{Lua}\text{\TeX}$  engines.
- `fontenc` – This package is used to load fonts. This package is only used with the  $\text{X}\text{\TeX}$  and  $\text{Lua}\text{\TeX}$  engines.

```

75 \mode
76   % Set up the fonts
77   \iffibeamer@fonts
78     \RequirePackage{ifthen}
79     \RequirePackage{ifxetex}
80     \RequirePackage{ifluatex}
81     \RequirePackage{lmodern}
```

```

82 \RequirePackage[sfdefault,lf]{carlito}
83 \renewcommand*\oldstylenums[1]{{\carlitoOsF #1}}
84
85 %% Load arev with scaling factor of .85
86 %% See <http://tex.stackexchange.com/a/181240/70941>
87 \DeclareFontFamily{OML}{zavm}{\skewchar\font=127 }
88 \DeclareFontShape{OML}{zavm}{m}{it}{<->s*[.85] zavmri7m{}}
89 \DeclareFontShape{OML}{zavm}{b}{it}{<->s*[.85] zavmbi7m{}}
90 \DeclareFontShape{OML}{zavm}{m}{sl}{<->ssub * zavm/m/it{}}
91 \DeclareFontShape{OML}{zavm}{bx}{it}{<->ssub * zavm/b/it{}}
92 \DeclareFontShape{OML}{zavm}{b}{sl}{<->ssub * zavm/b/it{}}
93 \DeclareFontShape{OML}{zavm}{bx}{sl}{<->ssub * zavm/b/sl{}}
94
95 \AtBeginDocument{
96   \SetSymbolFont{operators}  {normal}{OT1}{zavm}{m}{n}
97   \SetSymbolFont{letters}    {normal}{OML}{zavm}{m}{it}
98   \SetSymbolFont{symbols}   {normal}{OMS}{zavm}{m}{n}
99   \SetSymbolFont{largesymbols}{normal}{OMX}{iwona}{m}{n}}
100 \RequirePackage[sans]{dsfont}
101
102 \ifthenelse{\boolean{xetex}}{\OR\boolean{luatex}}{
103   \RequirePackage{fontspec}
104   \setmonofont[Scale=0.85,Ligatures=TeX]{DejaVu Sans Mono}
105 }{
106   \usepackage[scaled=0.85]{DejaVuSansMono}
107   \RequirePackage[resetfonts]{cmap}
108   \RequirePackage[T1]{fontenc}
109 }
110 \RequirePackage{setspace}
111 \setstretch{1.15}
112 \fi
113 \mode
114 <all>

```

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

```

115 \fibeamer@requireTheme{color}
116 \fibeamer@requireTheme{font}
117 \fibeamer@requireTheme{inner}
118 \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

`\file`

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.

```
119 \NeedsTeXFormat{LaTeX2e}
120 \ProvidesPackage{fbeamer/theme/mu/%
121   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.

```
122 \newenvironment{darkframes}{}{}
```

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

```
123 \mode
```

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.

```
124 \RequirePackage{listings}
125 \RequirePackage{ifthen}
126 \RequirePackage{tikz}
```

`\ifffbeamer@dark` The `\ifffbeamer@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.

```
127 \newif\ifffbeamer@dark\ffbeamer@darkfalse
```

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

```
128 \defbeamertemplate*{background canvas}{fbeamer}{%
129   \ifthenelse{%
130     \boolean{fbeamer@dark} \OR \c@framenumber=0
131   }{%
132     \begin{tikzpicture}
133       \clip (0,\fbeamer@clipbottom) rectangle
```

```

134      (\paperwidth,\fibeamer@cliptop);
135      \path [inner color = fibeamer@backgroundInner,
136              outer color = fibeamer@backgroundOuter]
137      (0,0) rectangle (\paperwidth,\paperwidth);
138      \end{tikzpicture}
139  }{}}
140 \mode
141 <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.

```

142 \NeedsTeXFormat{LaTeX2e}
143 \ProvidesPackage{fbeamer/theme/mu/%
144   beamerfontthemefibeamer-mu}[2015/08/26]
145 \mode<presentation>
146   \setbeamerfont{normal text}{size=\normalsize}
147   \setbeamerfont{title}{size=\LARGE, series=\bfseries}
148   \setbeamerfont{subtitle}{parent=normal text, size=\Large}
149   \setbeamerfont{frametitle}{size=\Large}
150   \setbeamerfont{framesubtitle}{size=\large, shape=\itshape}
151   \setbeamerfont{description item}{series=\bfseries}
152   \setbeamerfont{author}{size=\large}
153 \mode
154 <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.

```

155 \NeedsTeXFormat{LaTeX2e}
156 \ProvidesPackage{fbeamer/theme/mu/%
157   beamerinnerthemefibeamer-mu}[2015/08/26]
158 \defbeamertemplate*{itemize item}{fbeamer}{$\bullet$}
159 \defbeamertemplate*{itemize subitem}{fbeamer}{---}
160 \defbeamertemplate*{itemize subsubitem}{fbeamer}{\guillemotright}
161 \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.

```

162 \NeedsTeXFormat{LaTeX2e}
163 \ProvidesPackage{fbeamer/theme/mu/%
164   beamerouterthemefibeamer-mu}[2015/08/26]
165 \mode<presentation>

```

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.

```

166 \RequirePackage{ifthen}
167 \RequirePackage{ifpdf}
168 \ifpdf\else
169   \@ifundefined{pdfpagewidth}{\newdimen\pdfpagewidth}{}%
170   \@ifundefined{pdfpageheight}{\newdimen\pdfpageheight}{}%
171   \pdfpagewidth=\paperwidth
172   \pdfpageheight=\paperheight
173 \fi
174 \RequirePackage{tikz}
175 \RequirePackage{pgfcore}
```

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

```

176 % The logo dimensions
177 \newlength{\fibeamer@logowidth}
178 \setlength{\fibeamer@logowidth}{15mm}
179 \newlength{\fibeamer@logoheight}
180 \setlength{\fibeamer@logoheight}{1.32\fibeamer@logowidth}
181 % The logo padding
182 \newlength{\fibeamer@logopad}
183 \setlength{\fibeamer@logopad}{0.25\fibeamer@logowidth}
184 % The footer padding
185 \newlength{\fibeamer@footerpad}
186 \setlength{\fibeamer@footerpad}{\fibeamer@logopad}
187 % The side margins
188 \newlength{\fibeamer@margin}
189 \setlength{\fibeamer@margin}{\fibeamer@logopad}
190 \addtolength\fibeamer@margin{0.5\fibeamer@logowidth}
191 \setbeamersize{
192   text margin left=\fibeamer@margin,
193   text margin right=\fibeamer@margin}
194 % The upper margin
195 \newlength{\fibeamer@titleline}
196 \setlength{\fibeamer@titleline}{0.5\fibeamer@logoheight}
197 \usebeamertfont{frametitle}%
198 \addtolength\fibeamer@titleline{-1em}
199 % The background clipping
200 \newlength{\fibeamer@clipbottom}
201 \setlength{\fibeamer@clipbottom}{\paperwidth}
202 \addtolength\fibeamer@clipbottom{-\paperheight}
```

```

203 \setlength{\fibeamer@clipbottom}{0.5\fibeamer@clipbottom}
204 \newlength{\fibeamer@cliptop}
205 \setlength{\fibeamer@cliptop}{\paperwidth}
206 \addtolength\fibeamer@cliptop{-\fibeamer@clipbottom}
The outer theme completely culls the bottom navigation.
207 \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.
208 \defbeamertemplate*{headline}{fibeamer}{%
209   \begin{tikzpicture}[overlay,remember picture]
210     \node[anchor=north east,xshift=-\fibeamer@logopad]
211       at (current page.north east) {
212         \ifthenelse{\boolean{fbeamer@dark}}{\OR\c@framenumber=0}{%
213           \includegraphics[width=\fibeamer@logowidth]{%
214             \fibeamer@logo-dark}
215         }%
216         \includegraphics[width=\fibeamer@logowidth]{%
217           \fibeamer@logo-light}
218       }
219     };
220   \end{tikzpicture}}

```

The frame title is positioned on the axis of the faculty logo.

```

221 \defbeamertemplate*{frametitle}{fibeamer}{%
222   \vskip\fibeamer@titleline
223   \usebeamercolor[fg]{frametitle}%
224   \usebeamertfont{frametitle}%
225     \insertframetitle\par%
226   \usebeamercolor[fg]{framesubtitle}%
227   \usebeamertfont{framesubtitle}%
228     \insertframesubtitle}

```

The footnote contains the frame number. It is flushed right and aligned with the faculty logo.

```

229 \defbeamertemplate*{footline}{fibeamer}{%
230   \ifnum\c@framenumber=0\else%
231     \begin{tikzpicture}[overlay]
232       \node[anchor=south east,yshift=\fibeamer@footerpad,
233         xshift=-\fibeamer@footerpad] at (current page.south east) {
234         \usebeamercolor[fg]{framenumber}%
235         \usebeamertfont{framenumber}%
236         \insertframenumber/\inserttotalframenumber
237       };
238     \end{tikzpicture}
239   \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.

```

240 \defbeamertemplate*{title page}{fibeamer}{%
241   % This is slide 0
242   \setcounter{framenumber}{0}
243
244   % Input the title
245   \usebeamertfont{title}%
246   \usebeamercolor[fg]{title}%
247   \begin{minipage}[b][2\baselineskip][b]{\textwidth}%
248     \raggedright%
249     \inserttitle%
250   \end{minipage}
251   \vskip-.5\baselineskip
252
253   % Input the dashed line
254   \begin{pgfpicture}
255     \pgfsetlinewidth{2pt}
256     \pgfsetroundcap
257     \pgfsetdash{{0pt}{4pt}}{0cm}
258
259     \pgfpathmoveto{\pgfpoint{0mm}{0mm}}
260     \pgfpathlineto{\pgfpoint{\textwidth}{0mm}}
261
262     \pgfusepath{stroke}
263   \end{pgfpicture}
264   \vfill
265
266   % Input the subtitle
267   \usebeamertfont{subtitle}%
268   \begin{minipage}{\textwidth}
269     \raggedright%
270     \insertsubtitle%
271   \end{minipage}\vskip.25\baselineskip
272
273   % Input the author's name
274   \usebeamertfont{author}%
275   \begin{minipage}{\textwidth}
276     \raggedright%
277     \insertauthor%
278   \end{minipage}}
279
280 \mode
281 <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.

```
282 \NeedsTeXFormat{LaTeX2e}
283 \ProvidesPackage{fibeamer/theme/mu/%
284   beamercolorthemefibeamer-mu-fi}[2015/08/26]
285 \mode
```

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.

```
286 \definecolor{fibeamer@gold}{HTML}{a47312}
287 \definecolor{fibeamer@yellow}{HTML}{FFEB9C}
288 \definecolor{fibeamer@yellowDark}{HTML}{E9BC09}
289 \definecolor{fibeamer@gray}{HTML}{999999}
290 \colorlet{fibeamer@backgroundInner}{fibeamer@gold}
291 \colorlet{fibeamer@backgroundOuter}{fibeamer@gold!60!black}
```

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

```
292 \renewenvironment{darkframes}{%
293   \begingroup
294     \fibeamer@darktrue
295     %% Structures
296     \setbeamercolor*{structure}{fg=white, bg=fibeamer@gold}
297     \setbeamercolor*{frametitle}{fg=fibeamer@gold!25!white}
298     \setbeamercolor*{framesubtitle}{fg=white}
299     %% Text
300     \setbeamercolor*{normal text}{fg=white, bg=white}
301     %% Items
302     \setbeamercolor*{item}{fg=fibeamer@gold!25!white}
303     \setbeamercolor{footnote mark}{fg=fibeamer@gold!25!white}
304     %% Blocks
305     \setbeamercolor*{block title}{
306       use=structure, fg=white, bg=fibeamer@gold!60!white}
307     \setbeamercolor*{block title example}{
308       use=example text, fg=white, bg=fibeamer@gold!60!white}
309     \setbeamercolor*{block title alerted}{
310       use=alerted text, fg=white, bg=fibeamer@gold!90!white}
311     \setbeamercolor*{block body}{
312       fg=fibeamer@gold, use=block title,
313       bg=fibeamer@gray!15!white}
314     \usebeamercolor*{normal text}
315     % Code listings
316     \lstset{
317       commentstyle=\color{green!25!white},
318       keywordstyle=\color{blue!25!white},
319       stringstyle=\color{fibeamer@gold!30!white}}
320     }{%
321   \endgroup}
```

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

```
322  %% Structures
323  \setbeamercolor{structure}{fg=black!75!white, bg=white}
324  \setbeamercolor{frametitle}{fg=fibeamer@yellowDark}
325  \setbeamercolor{framesubtitle}{fg=black!60!white}
326  %% Text
327  \setbeamercolor{normal text}{fg=black!75!white}
328  %% Items
329  \setbeamercolor{item}{fg=fibeamer@yellowDark}
330  \setbeamercolor{footnote mark}{fg=fibeamer@yellowDark}
331  %% Blocks
332  \setbeamercolor{block title}{%
333    use=structure, fg=black!75!white, bg=fibeamer@yellow}
334  \setbeamercolor{block title example}{%
335    use=example text, fg=black!75!white, bg=fibeamer@yellow}
336  \setbeamercolor{block title alerted}{%
337    use=alerted text, fg=white, bg=black!75!white}
338  \setbeamercolor{block body}{%
339    fg=fibeamer@yellow, use=block title, bg=black!75!white}
340  %% Title
341  \setbeamercolor{title}{fg=white, bg=fibeamer@gold}
342  \setbeamercolor{title}{use=structure}
343  % Code listings
344  \lstset{
345    basicstyle=\footnotesize\ttfamily,
346    breakatwhitespace=false,
347    breaklines=true,
348    commentstyle=\color{green!60!black},
349    extendedchars=true,
350    keywordstyle=\color{blue},
351    showspaces=false,
352    showstringspaces=false,
353    showtabs=false,
354    stringstyle=\color{violet}}
355 \mode
356 <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.

```
357 \NeedsTeXFormat{LaTeX2e}
358 \ProvidesPackage{fibeamer/theme/mu/%
359   beamercolorthemefibeamer-mu-sci}[2015/08/26]
360 \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.

```
361 \definecolor{fibeamer@green}{HTML}{139632}
362 \definecolor{fibeamer@gray}{HTML}{999999}
363 \colorlet{fibeamer@backgroundInner}{fibeamer@green!90!black}
364 \colorlet{fibeamer@backgroundOuter}{fibeamer@green!60!black}
```

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

```
365 \renewenvironment{darkframes}{%
366   \begingroup
367   \fibeamer@darktrue
368   %% Structures
369   \setbeamercolor*{structure}{fg=white, bg=fibeamer@green}
370   \setbeamercolor*{frametitle}{fg=fibeamer@green!25!white}
371   \setbeamercolor*{framesubtitle}{fg=white}
372   %% Text
373   \setbeamercolor*{normal text}{fg=white, bg=white}
374   %% Items
375   \setbeamercolor*{item}{fg=fibeamer@green!25!white}
376   \setbeamercolor{footnote mark}{fg=fibeamer@green!25!white}
377   %% Blocks
378   \setbeamercolor*{block title}{
379     use=structure, fg=white, bg=fibeamer@green!60!white}
380   \setbeamercolor*{block title example}{
381     use=example text, fg=white, bg=fibeamer@green!60!white}
382   \setbeamercolor*{block title alerted}{
383     use=alerted text, fg=white, bg=fibeamer@green}
384   \setbeamercolor*{block body}{
385     fg=fibeamer@green, use=block title,
386     bg=fibeamer@gray!15!white}
387   \usebeamercolor*{normal text}
388   %% Code listings
389   \lstset{
390     commentstyle=\color{green!25!white},
391     keywordstyle=\color{blue!25!white},
392     stringstyle=\color{red!25!white}}
393   }{%
394 }
```

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

```
395 %% Structures
396 \setbeamercolor{structure}{fg=black!75!white, bg=white}
397 \setbeamercolor{frametitle}{fg=fibeamer@green}
398 \setbeamercolor{framesubtitle}{fg=black!75!white}
399 %% Text
400 \setbeamercolor{normal text}{fg=black}
401 %% Items
```

```

402 \setbeamercolor{item}{fg=fibeamer@green}
403 \setbeamercolor{footnote mark}{fg=fibeamer@green}
404 %% Blocks
405 \setbeamercolor{block title}{%
406   use=structure, fg=white, bg=fibeamer@green!50!white}
407 \setbeamercolor{block title example}{%
408   use=example text, fg=white, bg=fibeamer@green!50!white}
409 \setbeamercolor{block title alerted}{%
410   use=alerted text, fg=white, bg=fibeamer@green}
411 \setbeamercolor{block body}{%
412   fg=fibeamer@green, use=block title, bg=fibeamer@gray!20!white}
413 %% Title
414 \setbeamercolor{title}{fg=white, bg=fibeamer@green}
415 \setbeamercolor{title}{use=structure}
416 % Code listings
417 \lstset{
418   basicstyle=\footnotesize\ttfamily,
419   breakatwhitespace=false,
420   breaklines=true,
421   commentstyle=\color{green!60!black},
422   extendedchars=true,
423   keywordstyle=\color{blue},
424   showspaces=false,
425   showstringspaces=false,
426   showtabs=false,
427   stringstyle=\color{violet}}
428 \mode
429 <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.

```

430 \NeedsTeXFormat{LaTeX2e}
431 \ProvidesPackage{fibeamer/theme/mu/%
432   beamercolorthemefibeamer-mu-phil}[2015/08/26]
433 \mode<presentation>

```

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.

```

434 \definecolor{fibeamer@blue}{HTML}{0071B2}
435 \definecolor{fibeamer@gray}{HTML}{999999}
436 \colorlet{fibeamer@backgroundInner}{fibeamer@blue!80!black}

```

```

437 \colorlet{fibeamer@backgroundOuter}{fbeamer@blue!60!black}
The darkframes environment switches the \ifffbeamer@darktrue conditional on
and sets a dark color theme.
438 \renewenvironment{darkframes}{%
439   \begingroup
440     \fibeamer@darktrue
441     %% Structures
442     \setbeamercolor*{structure}{fg=white, bg=fibeamer@blue}
443     \setbeamercolor*{frametitle}{fg=fibeamer@blue!25!white}
444     \setbeamercolor*{framesubtitle}{fg=white}
445     %% Text
446     \setbeamercolor*{normal text}{fg=white, bg=white}
447     %% Items
448     \setbeamercolor*{item}{fg=fibeamer@blue!25!white}
449     \setbeamercolor{footnote mark}{fg=fibeamer@blue!25!white}
450     %% Blocks
451     \setbeamercolor*{block title}{%
452       use=structure, fg=white, bg=fibeamer@blue!60!white}
453     \setbeamercolor*{block title example}{%
454       use=example text, fg=white, bg=fibeamer@blue!60!white}
455     \setbeamercolor*{block title alerted}{%
456       use=alerted text, fg=white, bg=fibeamer@blue}
457     \setbeamercolor*{block body}{%
458       fg=fibeamer@blue, use=block title,
459       bg=fibeamer@gray!15!white}
460     \usebeamercolor*{normal text}
461     % Code listings
462     \lstset{
463       commentstyle=\color{green!25!white},
464       keywordstyle=\color{blue!25!white},
465       stringstyle=\color{red!25!white}}
466     }{%
467   \endgroup

```

Outside the darkframes environment, the light theme is used.

```

468 %% Structures
469 \setbeamercolor{structure}{fg=black!75!white, bg=white}
470 \setbeamercolor{frametitle}{fg=fibeamer@blue}
471 \setbeamercolor{framesubtitle}{fg=black!75!white}
472 %% Text
473 \setbeamercolor{normal text}{fg=black}
474 %% Items
475 \setbeamercolor{item}{fg=fibeamer@blue}
476 \setbeamercolor{footnote mark}{fg=fibeamer@blue}
477 %% Blocks
478 \setbeamercolor{block title}{%
479   use=structure, fg=white, bg=fibeamer@blue!50!white}
480 \setbeamercolor{block title example}{%
481   use=example text, fg=white, bg=fibeamer@blue!50!white}
482 \setbeamercolor{block title alerted}{%

```

```

483     use=alerted text, fg=white, bg=fibeamer@blue}
484     \setbeamercolor{block body}{%
485         fg=fibeamer@blue, use=block title, bg=fibeamer@gray!20!white}
486 %% Title
487 \setbeamercolor{title}{fg=white, bg=fibeamer@blue}
488 \setbeamercolor{title}{use=structure}
489 % Code listings
490 \lstset{
491     basicstyle=\footnotesize\ttfamily,
492     breakatwhitespace=false,
493     breaklines=true,
494     commentstyle=\color{green!60!black},
495     extendedchars=true,
496     keywordstyle=\color{blue},
497     showspaces=false,
498     showstringspaces=false,
499     showtabs=false,
500     stringstyle=\color{violet}}
501 \mode
502 <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.

```

503 \NeedsTeXFormat{LaTeX2e}
504 \ProvidesPackage{fibeamer/theme/mu/%
505   beamercolorthemefibeamer-mu-ped}[2015/08/26]
506 \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 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.

```

507 \definecolor{fibeamer@gold}{HTML}{CF7000}
508 \definecolor{fibeamer@orange}{HTML}{FABE6E}
509 \definecolor{fibeamer@orangeDark}{HTML}{F89C22}
510 \definecolor{fibeamer@gray}{HTML}{999999}
511 \colorlet{fibeamer@backgroundInner}{fibeamer@gold}
512 \colorlet{fibeamer@backgroundOuter}{fibeamer@gold!60!black}

```

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

```

513 \renewenvironment{darkframes}{%
514   \begingroup
515     \fibeamer@darktrue

```

```

516    %% Structures
517    \setbeamercolor*{structure}{fg=white, bg=fibeamer@gold}
518    \setbeamercolor*{frametitle}{fg=fibeamer@gold!25!white}
519    \setbeamercolor*{framesubtitle}{fg=white}
520    %% Text
521    \setbeamercolor*{normal text}{fg=white, bg=white}
522    %% Items
523    \setbeamercolor*{item}{fg=fibeamer@gold!25!white}
524    \setbeamercolor{footnote mark}{fg=fibeamer@gold!25!white}
525    %% Blocks
526    \setbeamercolor*{block title}{%
527        use=structure, fg=white, bg=fibeamer@gold!60!white}
528    \setbeamercolor*{block title example}{%
529        use=example text, fg=white, bg=fibeamer@gold!60!white}
530    \setbeamercolor*{block title alerted}{%
531        use=alerted text, fg=white, bg=fibeamer@gold!90!white}
532    \setbeamercolor*{block body}{%
533        fg=fibeamer@gold, use=block title,
534        bg=fibeamer@gray!15!white}
535    \usebeamercolor*{normal text}
536    % Code listings
537    \lstset{
538        commentstyle=\color{green!25!white},
539        keywordstyle=\color{blue!25!white},
540        stringstyle=\color{fibeamer@gold!30!white}}
541    }{%
542    \endgroup}

```

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

```

543    %% Structures
544    \setbeamercolor{structure}{fg=black!75!white, bg=white}
545    \setbeamercolor{frametitle}{fg=fibeamer@orangeDark}
546    \setbeamercolor{framesubtitle}{fg=black!60!white}
547    %% Text
548    \setbeamercolor{normal text}{fg=black!75!white}
549    %% Items
550    \setbeamercolor{item}{fg=fibeamer@orangeDark}
551    \setbeamercolor{footnote mark}{fg=fibeamer@orangeDark}
552    %% Blocks
553    \setbeamercolor{block title}{%
554        use=structure, fg=black!75!white, bg=fibeamer@orange}
555    \setbeamercolor{block title example}{%
556        use=example text, fg=black!75!white, bg=fibeamer@orange}
557    \setbeamercolor{block title alerted}{%
558        use=alerted text, fg=white, bg=black!75!white}
559    \setbeamercolor{block body}{%
560        fg=fibeamer@orange, use=block title, bg=black!75!white}
561    %% Title
562    \setbeamercolor{title}{fg=white, bg=fibeamer@gold}
563    \setbeamercolor{title}{use=structure}

```

```

564 % Code listings
565 \lstset{
566   basicstyle=\footnotesize\ttfamily,
567   breakatwhitespace=false,
568   breaklines=true,
569   commentstyle=\color{green!60!black},
570   extendedchars=true,
571   keywordstyle=\color{blue},
572   showspaces=false,
573   showstringspaces=false,
574   showtabs=false,
575   stringstyle=\color{violet}}
576 \mode
577 <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.

```

578 \NeedsTeXFormat{LaTeX2e}
579 \ProvidesPackage{fbeamer/theme/mu/%
580   beamercolorthemefibeamer-mu-fss}[2015/08/26]
581 \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.

```

582 \definecolor{fbeamer@cyan}{HTML}{00796E}
583 \definecolor{fbeamer@gray}{HTML}{999999}
584 \colorlet{fbeamer@backgroundInner}{fbeamer@cyan!80!black}
585 \colorlet{fbeamer@backgroundOuter}{fbeamer@cyan!60!black}

```

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

```

586 \renewenvironment{darkframes}{%
587   \begingroup
588     \ffbeamer@darktrue
589     %% Structures
590     \setbeamercolor*{structure}{fg=white, bg=fibeamer@cyan}
591     \setbeamercolor*{frametitle}{fg=fibeamer@cyan!25!white}
592     \setbeamercolor*{framesubtitle}{fg=white}
593     %% Text
594     \setbeamercolor*{normal text}{fg=white, bg=white}
595     %% Items
596     \setbeamercolor*{item}{fg=fibeamer@cyan!25!white}
597     \setbeamercolor{footnote mark}{fg=fibeamer@cyan!25!white}

```

```

598    %% Blocks
599    \setbeamercolor*{block title}{%
600        use=structure, fg=white, bg=fibeamer@cyan!60!white}
601    \setbeamercolor*{block title example}{%
602        use=example text, fg=white, bg=fibeamer@cyan!60!white}
603    \setbeamercolor*{block title alerted}{%
604        use=alerted text, fg=white, bg=fibeamer@cyan}
605    \setbeamercolor*{block body}{%
606        fg=fibeamer@cyan, use=block title,
607        bg=fibeamer@gray!15!white}
608    \usebeamercolor*{normal text}
609    % Code listings
610    \lstset{
611        commentstyle=\color{green!25!white},
612        keywordstyle=\color{blue!25!white},
613        stringstyle=\color{red!25!white}}
614    }{%
615    \endgroup}

```

Outside the darkframes environment, the light theme is used.

```

616    %% Structures
617    \setbeamercolor{structure}{fg=black!75!white, bg=white}
618    \setbeamercolor{frametitle}{fg=fibeamer@cyan}
619    \setbeamercolor{framesubtitle}{fg=black!75!white}
620    %% Text
621    \setbeamercolor{normal text}{fg=black}
622    %% Items
623    \setbeamercolor{item}{fg=fibeamer@cyan}
624    \setbeamercolor{footnote mark}{fg=fibeamer@cyan}
625    %% Blocks
626    \setbeamercolor{block title}{%
627        use=structure, fg=white, bg=fibeamer@cyan!50!white}
628    \setbeamercolor{block title example}{%
629        use=example text, fg=white, bg=fibeamer@cyan!50!white}
630    \setbeamercolor{block title alerted}{%
631        use=alerted text, fg=white, bg=fibeamer@cyan}
632    \setbeamercolor{block body}{%
633        fg=fibeamer@cyan, use=block title, bg=fibeamer@gray!20!white}
634    %% Title
635    \setbeamercolor{title}{fg=white, bg=fibeamer@cyan}
636    \setbeamercolor{title}{use=structure}
637    % Code listings
638    \lstset{
639        basicstyle=\footnotesize\ttfamily,
640        breakatwhitespace=false,
641        breaklines=true,
642        commentstyle=\color{green!60!black},
643        extendedchars=true,
644        keywordstyle=\color{blue},
645        showspaces=false,

```

```

646     showstringspaces=false,
647     showtabs=false,
648     stringstyle=\color{violet}}
649 \mode
650 <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.

```

651 \NeedsTeXFormat{LaTeX2e}
652 \ProvidesPackage{fbeamer/theme/mu/%
653   beamercolorthemefibeamer-mu-law}[2015/08/26]
654 \mode

```

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.

```

655 \definecolor{fbeamer@violet}{HTML}{660099}
656 \definecolor{fbeamer@gray}{HTML}{999999}
657 \colorlet{fbeamer@backgroundInner}{fbeamer@violet}
658 \colorlet{fbeamer@backgroundOuter}{fbeamer@violet!60!black}

```

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

```

659 \renewenvironment{darkframes}{%
660   \begingroup
661     \fibeamer@darktrue
662     %% Structures
663     \setbeamercolor*{structure}{fg=white, bg=fibeamer@violet}
664     \setbeamercolor*{frametitle}{fg=fibeamer@violet!25!white}
665     \setbeamercolor*{framesubtitle}{fg=white}
666     %% Text
667     \setbeamercolor*{normal text}{fg=white, bg=white}
668     %% Items
669     \setbeamercolor*{item}{fg=fibeamer@violet!25!white}
670     \setbeamercolor{footnote mark}{fg=fibeamer@violet!25!white}
671     %% Blocks
672     \setbeamercolor*{block title}{%
673       use=structure, fg=white, bg=fibeamer@violet!60!white}
674     \setbeamercolor*{block title example}{%
675       use=example text, fg=white, bg=fibeamer@violet!60!white}
676     \setbeamercolor*{block title alerted}{%
677       use=alerted text, fg=white, bg=fibeamer@violet!90!white}
678     \setbeamercolor*{block body}{%
679       fg=fibeamer@violet, use=block title,

```

```

680      bg=fibeamer@gray!15!white}
681      \usebeamercolor*{normal text}
682      % Code listings
683      \lstset{
684          commentstyle=\color{green!25!white},
685          keywordstyle=\color{blue!25!white},
686          stringstyle=\color{fibeamer@violet!25!white}}
687      }%
688      \endgroup}

Outside the darkframes environment, the light theme is used.

689  %% Structures
690  \setbeamercolor{structure}{fg=black!75!white, bg=white}
691  \setbeamercolor{frametitle}{fg=fibeamer@violet}
692  \setbeamercolor{framesubtitle}{fg=black!75!white}
693  %% Text
694  \setbeamercolor{normal text}{fg=black}
695  %% Items
696  \setbeamercolor{item}{fg=fibeamer@violet}
697  \setbeamercolor{footnote mark}{fg=fibeamer@violet}
698  %% Blocks
699  \setbeamercolor{block title} {
700      use=structure, fg=white, bg=fibeamer@violet!50!white}
701  \setbeamercolor{block title example} {
702      use=example text, fg=white, bg=fibeamer@violet!50!white}
703  \setbeamercolor{block title alerted} {
704      use=alerted text, fg=white, bg=fibeamer@violet}
705  \setbeamercolor{block body} {
706      fg=fibeamer@violet, use=block title, bg=fibeamer@gray!20!white}
707  %% Title
708  \setbeamercolor{title}{fg=white, bg=fibeamer@violet}
709  \setbeamercolor{title}{use=structure}
710  % Code listings
711  \lstset{
712      basicstyle=\footnotesize\ttfamily,
713      breakatwhitespace=false,
714      breaklines=true,
715      commentstyle=\color{green!60!black},
716      extendedchars=true,
717      keywordstyle=\color{blue},
718      showspaces=false,
719      showstringspaces=false,
720      showtabs=false,
721      stringstyle=\color{violet}}}
722 \mode
723 <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.

```
724 \NeedsTeXFormat{LaTeX2e}
725 \ProvidesPackage{fibeamer/theme/mu/%
726   beamercolorthemefibeamer-mu-econ}[2015/08/26]
727 \mode
```

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.

```
728 \definecolor{fibeamer@brown}{HTML}{6e222c}
729 \definecolor{fibeamer@gray}{HTML}{999999}
730 \colorlet{fibeamer@backgroundInner}{fibeamer@brown}
731 \colorlet{fibeamer@backgroundOuter}{fibeamer@brown!60!black}
```

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

```
732 \renewenvironment{darkframes}{%
733   \begingroup
734     \fibeamer@darktrue
735     %% Structures
736     \setbeamercolor*{structure}{fg=white, bg=fibeamer@brown}
737     \setbeamercolor*{frametitle}{fg=fibeamer@brown!25!white}
738     \setbeamercolor*{framesubtitle}{fg=white}
739     %% Text
740     \setbeamercolor*{normal text}{fg=white, bg=white}
741     %% Items
742     \setbeamercolor*{item}{fg=fibeamer@brown!25!white}
743     \setbeamercolor{footnote mark}{fg=fibeamer@brown!25!white}
744     %% Blocks
745     \setbeamercolor*{block title}{%
746       use=structure, fg=white, bg=fibeamer@brown!60!white}
747     \setbeamercolor*{block title example}{%
748       use=example text, fg=white, bg=fibeamer@brown!60!white}
749     \setbeamercolor*{block title alerted}{%
750       use=alerted text, fg=white, bg=fibeamer@brown!90!white}
751     \setbeamercolor*{block body}{%
752       fg=fibeamer@brown, use=block title,
753       bg=fibeamer@gray!15!white}
754     \usebeamercolor*{normal text}
755     % Code listings
756     \lstset{
757       commentstyle=\color{green!25!white},
```

```

758     keywordstyle=\color{blue!25!white},
759     stringstyle=\color{fibeamer@brown!25!white}}
760   }{%
761 \endgroup}
Outside the darkframes environment, the light theme is used.
762 %% Structures
763 \setbeamercolor{structure}{fg=black!75!white, bg=white}
764 \setbeamercolor{frametitle}{fg=fibeamer@brown}
765 \setbeamercolor{framesubtitle}{fg=black!75!white}
766 %% Text
767 \setbeamercolor{normal text}{fg=black}
768 %% Items
769 \setbeamercolor{item}{fg=fibeamer@brown}
770 \setbeamercolor{footnote mark}{fg=fibeamer@brown}
771 %% Blocks
772 \setbeamercolor{block title}{%
773   use=structure, fg=white, bg=fibeamer@brown!50!white}
774 \setbeamercolor{block title example}{%
775   use=example text, fg=white, bg=fibeamer@brown!50!white}
776 \setbeamercolor{block title alerted}{%
777   use=alerted text, fg=white, bg=fibeamer@brown}
778 \setbeamercolor{block body}{%
779   fg=fibeamer@brown, use=block title, bg=fibeamer@gray!20!white}
780 %% Title
781 \setbeamercolor{title}{fg=white, bg=fibeamer@brown}
782 \setbeamercolor{title}{use=structure}
783 % Code listings
784 \lstset{
785   basicstyle=\footnotesize\ttfamily,
786   breakatwhitespace=false,
787   breaklines=true,
788   commentstyle=\color{green!60!black},
789   extendedchars=true,
790   keywordstyle=\color{blue},
791   showspaces=false,
792   showstringspaces=false,
793   showtabs=false,
794   stringstyle=\color{violet}}
795 \mode
796 <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.

```
797 \NeedsTeXFormat{LaTeX2e}
```

```

798 \ProvidesPackage{fibeamer/theme/mu/%
799   beamercolorthemefibeamer-mu-med}[2015/08/26]
800 \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.

```

801 \definecolor{fibeamer@red}{HTML}{c82600}
802 \definecolor{fibeamer@gray}{HTML}{999999}
803 \colorlet{fibeamer@backgroundInner}{fibeamer@red}
804 \colorlet{fibeamer@backgroundOuter}{fibeamer@red!60!black}

```

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

```

805 \renewenvironment{darkframes}{%
806   \begingroup
807     \fibeamer@darktrue
808     %% Structures
809     \setbeamercolor*{structure}{fg=white, bg=fibeamer@red}
810     \setbeamercolor*{frametitle}{fg=fibeamer@red!25!white}
811     \setbeamercolor*{framesubtitle}{fg=white}
812     %% Text
813     \setbeamercolor*{normal text}{fg=white, bg=white}
814     %% Items
815     \setbeamercolor*{item}{fg=fibeamer@red!25!white}
816     \setbeamercolor{footnote mark}{fg=fibeamer@red!25!white}
817     %% Blocks
818     \setbeamercolor*{block title}{%
819       use=structure, fg=white, bg=fibeamer@red!60!white}
820     \setbeamercolor*{block title example}{%
821       use=example text, fg=white, bg=fibeamer@red!60!white}
822     \setbeamercolor*{block title alerted}{%
823       use=alerted text, fg=white, bg=fibeamer@red!90!white}
824     \setbeamercolor*{block body}{%
825       fg=fibeamer@red, use=block title,
826       bg=fibeamer@gray!15!white}
827     \usebeamercolor*{normal text}
828     % Code listings
829     \lstset{%
830       commentstyle=\color{green!25!white},
831       keywordstyle=\color{blue!25!white},
832       stringstyle=\color{fibeamer@red!25!white}}
833   }{%
834   \endgroup
}

```

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

```

835 %% Structures
836 \setbeamercolor{structure}{fg=black!75!white, bg=white}
837 \setbeamercolor{frametitle}{fg=fibeamer@red}
838 \setbeamercolor{framesubtitle}{fg=black!75!white}

```

```

839  %% Text
840  \setbeamercolor{normal text}{fg=black}
841  %% Items
842  \setbeamercolor{item}{fg=fibeamer@red}
843  \setbeamercolor{footnote mark}{fg=fibeamer@red}
844  %% Blocks
845  \setbeamercolor{block title}{%
846    use=structure, fg=white, bg=fibeamer@red!50!white}
847  \setbeamercolor{block title example}{%
848    use=example text, fg=white, bg=fibeamer@red!50!white}
849  \setbeamercolor{block title alerted}{%
850    use=alerted text, fg=white, bg=fibeamer@red}
851  \setbeamercolor{block body}{%
852    fg=fibeamer@red, use=block title, bg=fibeamer@gray!20!white}
853  %% Title
854  \setbeamercolor{title}{fg=white, bg=fibeamer@red}
855  \setbeamercolor{title}{use=structure}
856  % Code listings
857  \lstset{
858    basicstyle=\footnotesize\ttfamily,
859    breakatwhitespace=false,
860    breaklines=true,
861    commentstyle=\color{green!60!black},
862    extendedchars=true,
863    keywordstyle=\color{blue},
864    showspaces=false,
865    showstringspaces=false,
866    showtabs=false,
867    stringstyle=\color{violet}}
868 \mode
869 <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.

```

870 \NeedsTeXFormat{LaTeX2e}
871 \ProvidesPackage{fibeamer/theme/mu/%
872   beamercolorthemefibeamer-mu-fsps}[2015/08/26]
873 \mode<presentation>

```

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.

```

874 \definecolor{fibeamer@blue}{HTML}{1B458F}
875 \definecolor{fibeamer@gray}{HTML}{999999}
876 \colorlet{fibeamer@backgroundInner}{fibeamer@blue}
877 \colorlet{fibeamer@backgroundOuter}{fibeamer@blue!60!black}

```

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

```

878 \renewenvironment{darkframes}{%
879   \begingroup
880     \fibeamer@darktrue
881     %% Structures
882     \setbeamercolor*{structure}{fg=white, bg=fibeamer@blue}
883     \setbeamercolor*{frametitle}{fg=fibeamer@blue!25!white}
884     \setbeamercolor*{framesubtitle}{fg=white}
885     %% Text
886     \setbeamercolor*{normal text}{fg=white, bg=white}
887     %% Items
888     \setbeamercolor*{item}{fg=fibeamer@blue!25!white}
889     \setbeamercolor{footnote mark}{fg=fibeamer@blue!25!white}
890     %% Blocks
891     \setbeamercolor*{block title}{%
892       use=structure, fg=white, bg=fibeamer@blue!60!white}
893     \setbeamercolor*{block title example}{%
894       use=example text, fg=white, bg=fibeamer@blue!60!white}
895     \setbeamercolor*{block title alerted}{%
896       use=alerted text, fg=white, bg=fibeamer@blue!95!white}
897     \setbeamercolor*{block body}{%
898       fg=fibeamer@blue, use=block title,
899       bg=fibeamer@gray!15!white}
900     \usebeamercolor*{normal text}
901     % Code listings
902     \lstset{
903       commentstyle=\color{green!25!white},
904       keywordstyle=\color{blue!25!white},
905       stringstyle=\color{red!25!white}}
906   }%
907 \endgroup

```

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

```

908 %% Structures
909 \setbeamercolor{structure}{fg=black!75!white, bg=white}
910 \setbeamercolor{frametitle}{fg=fibeamer@blue}
911 \setbeamercolor{framesubtitle}{fg=black!75!white}
912 %% Text
913 \setbeamercolor{normal text}{fg=black}
914 %% Items
915 \setbeamercolor{item}{fg=fibeamer@blue}
916 \setbeamercolor{footnote mark}{fg=fibeamer@blue}
917 %% Blocks
918 \setbeamercolor{block title}{%
919   use=structure, fg=white, bg=fibeamer@blue!50!white}

```

```

920 \setbeamercolor{block title example}{
921   use=example text, fg=white, bg=fibeamer@blue!50!white}
922 \setbeamercolor{block title alerted}{
923   use=alerted text, fg=white, bg=fibeamer@blue}
924 \setbeamercolor{block body}{
925   fg=fibeamer@blue, use=block title, bg=fibeamer@gray!20!white}
926 % Title
927 \setbeamercolor{title}{fg=white, bg=fibeamer@blue}
928 \setbeamercolor{title}{use=structure}
929 % Code listings
930 \lstset{
931   basicstyle=\footnotesize\ttfamily,
932   breakatwhitespace=false,
933   breaklines=true,
934   commentstyle=\color{green!60!black},
935   extendedchars=true,
936   keywordstyle=\color{blue},
937   showspaces=false,
938   showstringspaces=false,
939   showtabs=false,
940   stringstyle=\color{violet}}
941 \mode
942 <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	C
\- .....	159
\ifpackageloaded .....	67
\@ifundefined .....	169, 170
<b>A</b>	
\addtolength .....	190, 198, 202, 206
\AtBeginDocument .....	95
<b>B</b>	
\baselineskip .....	247, 251, 271
\begin ...	132, 209, 231, 247, 254, 268, 275
\begingroup .....	293, 366, 439, 514, 587, 660, 733, 806, 879
\bfseries .....	147, 151
\boolean .....	102, 130, 212
\bullet .....	158
<b>D</b>	
\darkframes .....	122

\DeclareFontFamily	87
\DeclareFontShape	88, 89, 90, 91, 92, 93
\DeclareOptionBeamer	3, 5, 6, 8, 10, 55, 59, 63
\def	6, 8, 12, 14, 17, 56, 60, 63, 66, 68
\defbeamertemplate	128, 158, 159, 160, 207, 208, 221, 229, 240
\definecolor	286, 287, 288, 289, 361, 362, 434, 435, 507, 508, 509, 510, 582, 583, 655, 656, 728, 729, 801, 802, 874, 875
<b>E</b>	
\else	13, 20, 24, 27, 31, 35, 38, 42, 45, 50, 168, 230
\empty	17, 18, 22, 29, 33, 57, 61
\end	138, 220, 238, 250, 263, 271, 278
\endgroup	321, 394, 467, 542, 615, 688, 761, 834, 907
\ExecuteOptionsBeamer	4, 7, 9, 16, 58, 62, 64
<b>F</b>	
\fi	15, 26, 40, 41, 47, 48, 49, 52, 53, 54, 112, 173, 239
\fibeamer@basePath	10, 19, 39, 46, 51
\fibeamer@clipbottom	133, 200, 201, 202, 203, 206
\fibeamer@cliptop	134, 204, 205, 206
\fibeamer@darkfalse	127
\fibeamer@darktrue	294, 367, 440, 515, 588, 661, 734, 807, 880
\fibeamer@empty	11
\fibeamer@faculty	8, 65, 73
\fibeamer@fontsfalse	5
\fibeamer@fontstrue	3
\fibeamer@footerpad	185, 186, 232, 233
\fibeamer@logo	63, 214, 217
\fibeamer@logohight	179, 180, 196
\fibeamer@logopad	182, 183, 186, 189, 210
\fibeamer@logopath	59, 65
\fibeamer@logowidth	177, 178, 180, 183, 190, 213, 216
\fibeamer@margin	188, 189, 190, 192, 193
\fibeamer@require	66, 69, 70, 72
\fibeamer@requireTheme	68, 115, 116, 117, 118
\fibeamer@subdir	17, 56, 60
\fibeamer@themePath	55, 69, 70, 72
\fibeamer@titleline	195, 196, 198, 222
\fibeamer@university	6, 62, 65, 70, 71, 72, 73
\fibeamer@version	1
\file	7
\font	87
\footnotesize	345, 418, 491, 566, 639, 712, 785, 858, 931
<b>G</b>	
\guillemotright	160
<b>I</b>	
\if	21, 28, 32, 36, 43
\iffibeamer@dark	127
\iffibeamer@fonts	1, 77
\IfFileExists	66
\ifnum	230
\ifpdf	168
\ifthenelse	102, 129, 212
\ifx	11, 18, 22, 29, 33
\includegraphics	213, 216
\insertauthor	277
\insertbiblabel	161
\insertframenumber	236
\insertframesubtitle	228
\insertframetitle	225
\insertsubtitle	270
\inserttitle	249
\inserttotalframenumber	236
\itshape	150
<b>L</b>	
\LARGE	147
\Large	148, 149
\large	150, 152
\lstset	316, 344, 389, 417, 462, 490, 537, 565, 610, 638, 683, 711, 756, 784, 829, 857, 902, 930
<b>M</b>	
\mode	75, 113, 123, 140, 145, 153, 165, 280, 285, 355, 360, 428, 433, 501, 506, 576, 581, 649, 654, 722, 727, 795, 800, 868, 873, 941
<b>N</b>	
\NeedsTeXFormat	119, 142, 155, 162, 282, 357, 430, 503, 578, 651, 724, 797, 870
\newdimen	169, 170

\newenvironment . . . . .	122
\newif . . . . .	2, 127
\newlength . . . . .	
177, 179, 182, 185, 188, 195, 200, 204	
\node . . . . .	210, 232
\normalsize . . . . .	146
 O	
\oldstylenums . . . . .	83
\OR . . . . .	102, 130, 212
 P	
\paperheight . . . . .	172, 202
\paperwidth . . . . .	134, 137, 171, 201, 205
\par . . . . .	225
\path . . . . .	135
\pdfpageheight . . . . .	170, 172
\pdfpagewidth . . . . .	169, 171
\pgfpathlineto . . . . .	260
\pgfpathmoveto . . . . .	259
\pgfpoint . . . . .	259, 260
\pgfsetdash . . . . .	257
\pgfsetlinewidth . . . . .	255
\pgfsetroundcap . . . . .	256
\pgfusepath . . . . .	262
\ProcessOptionsBeamer . . . . .	74
\ProvidesPackage . . . . .	
1, 120, 143, 156, 163, 283,	
358, 431, 504, 579, 652, 725, 798, 871	
 R	
\raggedright . . . . .	248, 269, 276
\renewcommand . . . . .	83
\renewenvironment . . . . .	292,
365, 438, 513, 586, 659, 732, 805, 878	
\RequirePackage . . . . .	67, 78,
79, 80, 81, 82, 100, 103, 107, 108,	
110, 124, 125, 126, 166, 167, 174, 175	
 S	
\setbeamercolor . . . . .	296,
297, 298, 300, 302, 303, 305, 307,	
309, 311, 323, 324, 325, 327, 329,	
330, 332, 334, 336, 338, 341, 342,	
369, 370, 371, 373, 375, 376, 378,	
380, 382, 384, 396, 397, 398, 400,	
402, 403, 405, 407, 409, 411, 414,	
415, 442, 443, 444, 446, 448, 449,	
451, 453, 455, 457, 469, 470, 471,	
473, 475, 476, 478, 480, 482, 484,	
487, 488, 517, 518, 519, 521, 523,	
524, 526, 528, 530, 532, 544, 545,	
546, 548, 550, 551, 553, 555, 557,	
559, 562, 563, 590, 591, 592, 594,	
596, 597, 599, 601, 603, 605, 617,	
618, 619, 621, 623, 624, 626, 628,	
630, 632, 635, 636, 663, 664, 665,	
667, 669, 670, 672, 674, 676, 678,	
690, 691, 692, 694, 696, 697, 699,	
701, 703, 705, 708, 709, 736, 737,	
738, 740, 742, 743, 745, 747, 749,	
751, 763, 764, 765, 767, 769, 770,	
772, 774, 776, 778, 781, 782, 809,	
810, 811, 813, 815, 816, 818, 820,	
822, 824, 836, 837, 838, 840, 842,	
843, 845, 847, 849, 851, 854, 855,	
882, 883, 884, 886, 888, 889, 891,	
893, 895, 897, 909, 910, 911, 913,	
915, 916, 918, 920, 922, 924, 927, 928	
\setbeamerfont . . . . .	
... 146, 147, 148, 149, 150, 151, 152	
\setbeamersize . . . . .	191
\setbeamertemplate . . . . .	161
\setcounter . . . . .	242
\setlength . . . . .	178,
180, 183, 186, 189, 196, 201, 203, 205	
\setmonofont . . . . .	104
\setstretch . . . . .	111
\SetSymbolFont . . . . .	96, 97, 98, 99
\skewchar . . . . .	87
 T	
\textwidth . . . . .	247, 260, 268, 275
\ttfamily . . . . .	345,
418, 491, 566, 639, 712, 785, 858, 931	
 U	
\usebeamercolor . . . . .	
... 223, 226, 234, 246, 314,	
387, 460, 535, 608, 681, 754, 827, 900	
\usebeamerfont . . . . .	
... 197, 224, 227, 235, 245, 267, 274	
\usepackage . . . . .	106
 V	
\vfill . . . . .	264
\vskip . . . . .	222, 251, 271

## Change History

v1.0.1	port. [VN] . . . . .	9
General: Added DVI output sup-		