CZECH TECHNICAL UNIVERSITY IN PRAGUE

F3 Faculty of Electrical Engineering
Department of Mathematics

CTUslides —
simple slides
in CTUstyle design

Petr Olšák
petr@olsak.net

http://petr.olsak.net/ctustyle.html

Basics

- **The document is included in a file (say** `file.tex`**) and it can be processed by** `pdfcsplain file` **command.**

- **The header of the document should be:**

```
\input ctuslides2 % slides macro (in version 2)
\worktype[B/EN]    % type of the work (B,M,D,O) and language (CZ,SK,EN)
\faculty{F3}       % the faculty in short
\department {Department of Mathematics} % depart
ment

\slideshow         % begin of the document
... document ...
\pg.
```

- **The document must be finished by** `\pg` **followed by period.**

- **You need OPmac in the version May 2015 or newer. Available at** `http://petr.olsak.net/opmac-e.html`.

- **The work type should be set similarly as in CTUstyle.**

- **Only** `\worktype`, `\faculty` **and** `\department` **work here. No more declaration sequences from CTUstyle.**

The structural commands

- **You can type** ∗ **for starting of the item.**

- **Nested items lists (second and more level) are created in the** `\begitems...\enditems` **environments.**

- **The slide titles are created by** `\sec Text` **followed by empty line. You can use** `\secc Text` **similarly.**

- **The title page (first slide) can be special if** `\tit Title` **(followed by empty line) is used here.**

- **The** `\subtit Author name etc.` **(followed by empty line) can be used after** `\tit` **at the first slide.**

- **The paragraph texts are ragged right.**

- **You can use** `\nl` **for new line in the paragraph.**

- **You can use** `\pg` **followed by** + **or** , **or** . **for new slide.**

- **The page-bar in the right corner is clickable at it will be created correctly after second pass of the TEX run.**

Next page (next slide)

- **The control sequence $\backslash$pg must be followed by:**

  - **the character $\boxed{+}$ – next page keeps the same text and a next text is added (usable for partially uncovering of ideas),**

Next page (next slide)

- **The control sequence** $\backslash\text{pg}$ **must be followed by:**

  - **the character** $\boxed{+}$ **– next page keeps the same text and a next text is added (usable for partially uncovering of ideas),**

  - **the character** $\boxed{;}$ **– normal next page,**

Next page (next slide)

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    - **the character** $\boxed{+}$ **– next page keeps the same text and a next text is added (usable for partially uncovering of ideas),**

    - **the character** $\boxed{;}$ **– normal next page,**

    - **the character** $\boxed{.}$ **– the end of the document.**

Next page (next slide)

- **The control sequence** \pg **must be followed by:**

  - **the character** + **– next page keeps the same text and a next text is added** (**usable for partially uncovering of ideas**),

  - **the character** ; **– normal next page,**

  - **the character** . **– the end of the document.**

- **Summary:**

```
\pg+     ... uncover next text
\pg;     ... next page
\pg.     ... the end of the document
```

Next page (next slide)

- **The control sequence** \pg **must be followed by:**

    - **the character** $\boxed{+}$ **– next page keeps the same text and a next text is added (usable for partially uncovering of ideas),**

    - **the character** $\boxed{;}$ **– normal next page,**

    - **the character** $\boxed{.}$ **– the end of the document.**

- **Summary:**

```
\pg+      ... uncover next text
\pg;      ... next page
\pg.      ... the end of the document
```

- **If the control sequence** \slideshow **is removed (or commented out) from the beginning of the document then** \pg+ **sequences are deactivated. This is usable for printing version of the document.**

- **Another variant is** \pg= **(i. e.** \pg **followed by** $\boxed{=}$**). It does not create new page, but it is used for verbatim environment (see next slide. . .).**

Verbatim

Verbatim in paragraph

- **In-line verbatim doesn't work with declared** `\activettchar` **when** `\slideshow` **is used.**

- **You can use the** `\code` **sequence described in OPmac trick 0102, see** http://petr.olsak.net/opmac-tricks-e.html#code.

- **The argument of the** `\code` **sequence is printed verbatim, but special TEX characters must be preceded by backslash. I. e. backslash is printed when it is doubled.**

Verbatim

Verbatim in paragraph

- **In-line verbatim doesn't work with declared** `\activettchar` **when** `\slideshow` **is used.**

- **You can use the** `\code` **sequence described in OPmac trick 0102, see** `http://petr.olsak.net/opmac-tricks-e.html#code`**.**

- **The argument of the** `\code` **sequence is printed verbatim, but special T$_E$X characters must be preceded by backslash. I. e. backslash is printed when it is doubled.**

Multi-line verbatim

- **Multi-line verbatim is printed by** `\begtt...\endtt` **but** `\pg=` **must preceded:**

```
\pg=\begtt
... verbatim text ...
\endtt
```

Example of multi-line verbatim

The source code includes:

```
\pg=\Red\typosize[13/15]\begtt
#include <stdio.h>
int main();
{
  printf("Hello world!\n");
}
\endtt
```

Example of multi-line verbatim

The source code includes:

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\pg=\Red\typosize[13/15]\begtt
#include <stdio.h>
int main();
{
  printf("Hello world!\n");
}
\endtt
```

and the result is:

```
#include <stdio.h>
int main();
{
  printf("Hello world!\n");
}
```

Note that local declarations can be inserted between \pg= **and** \begtt.

Limits of the \pg+ sequence

- **The \pg+ sequence cannot be used inside a group.**

- **The exception is the nested environment** `\begitems...\enditems.`

7+

Limits of the \pg+ sequence

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What to do?

- **If you need to set a di erent font size by** \typosize **or** \typoscale **then you this size globally and you can use** \pg+ **inside di erent size of the font. Finally, you have to return back to normal size by the** \normalsize **sequence.**
- **If you need to partially uncover the multi-line verbatim then you can use:**

```
\pg=\begtt
... first line of the code ...
\endtt \pg+ \pg=\begtt
... second line of the code ...
\endtt \pg+
```

- **If you need to uncover the texts more ingenious then you can use macros** \use **or** \pshow **(see next slide...)**

Uncovering by \use and \pshow

- **The macro** `\use{condition}\action` **runs** `\action` **only if the number of the slide layer passes the given condition.**

- **The macro** `\pshow X` (**means partially show**) **prints the following text to the end of the current group:**
  - **invisible, if the number of the slide layer is less than X,**
  - **red, if the number of slide the layer is equal to X,**
  - **normal (black), if the number of slide layers is greater than X.**

- **The number of the slide layer is reset to one after each** `\pg;` **and it is incremented by one after each** `\pg+`**.**

- **The** `\pshow` **macro is defined by the** `\use` **macro as follows:**

  `\def\pshow#1{\use{=#1}\Red \use{<#1}\White \ignorespaces}`

  You can redefine it as you wish.

```
\secc Ideas in special order

* {\pshow1 First idea}
* {\pshow3 Second idea}
* {\pshow2 Third idea}

\pg+\pg+\pg+

\secc A formula

Consider
$$
  E = {\pshow5 m}{\pshow6 c^2}
$$

\pg+\pg+\pg+

And that is all.

\pg;
```

Ideas in special order

- **First idea**
- ■
- ■

9+

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Ideas in special order

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■

■ **Third idea**

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An example of \pshow usage

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A formula

Consider

$$E = mc^2$$

And that is all.

Tables, pictures

- **Tables can be created by** `\table` **or** `\ctable` **macro.**

- **Pictures can be included by** `\inspic` **macro.**

- **See OPmac documentation for more details.**

- **The centering would be done by the** `\centerline{}` **macro:**

- **Example:**

Tables, pictures

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- **Pictures can be included by** `\inspic` **macro.**

- **See OPmac documentation for more details.**

- **The centering would be done by the** `\centerline{}` **macro:**

- **Example:**

  `\centerline{\picw=5cm \inspic cmelak1.jpg }`

Comparison CTUslides with Beamer*

The LaTeX package Beamer gives much more features and many themes are prepared for Beamer, **but**

- the user of Beamer is forced to *program* his/her document using dozens of `\begin{foo}` and `\end{foo}` and many another programming constructions,

- on the other hand, plain TeX gives you a possibility to simply *write* your document with minimal markup. The result is more compact.

11+

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The L^AT_EX package Beamer gives much more features and many themes are prepared for Beamer, **but**

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- You need to read 250 pages of doc for understanding Beamer,

- on the other hand, you need to read only ten slides** and you are ready to use CTUslides.

- A notice for programmers: to create another individual typographical design for L^AT_EX is much more complicated than to do the same in plain T_EX. And you need to seriously understand plain T_EX if you want to do something more complicated in L^AT_EX.

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Thanks for your attention

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Questions?