The **ALTA** Beamer Class

Version 1.1

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Contents

1 "Quickstart"

The presentation theme **ALTA** provides the corparate design of the University of Bremen, adapted to the beamer class by Till Tantau, and is based on the presentation theme **ZeTeM** by Dirk Lorenz and Kristan Bredies [2].

Before you read this instructions to the **ALTA** theme it is recommended to read The User's Guide to the Beamer Class [1] and to get familiar with the beamer class.

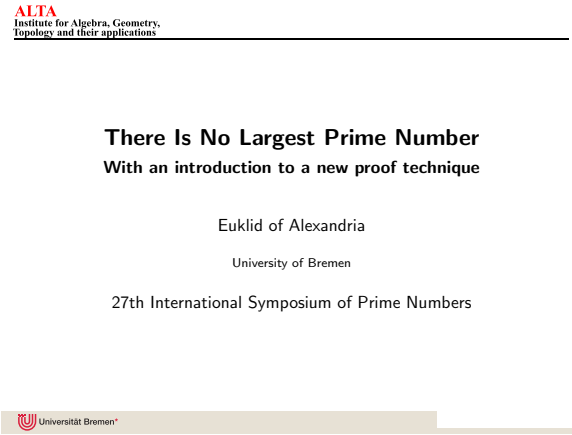
How-To: Basically it is really simple to use the **ALTA** theme. Just copy the files in your working directory and use the declaration

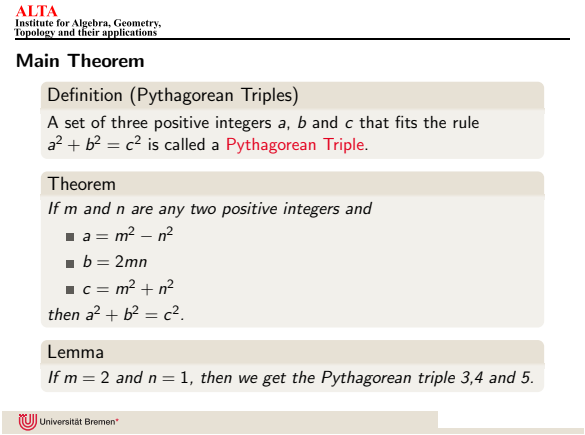
```
\usetheme[<options>]{alta}
```

in the preamble of your `.tex`-file.

The plain version without any options produces an output like this:

Example:





There are a few possibilities to control the appearance of the theme. These will be explained in the next sections and an overview with additional visual examples as the one above can be found in appendix A.

If you compile using `latex` and not `pdflatex` (hence the workflow: `tex` → `dvi` → `ps` → `pdf` or `tex` → `ps` → `pdf` is used), you have to enable the option `dvi` which ensures that `.eps`-images are used. The default setting is that the `.pdf`-images are used. Otherwise error messages will be prompted.

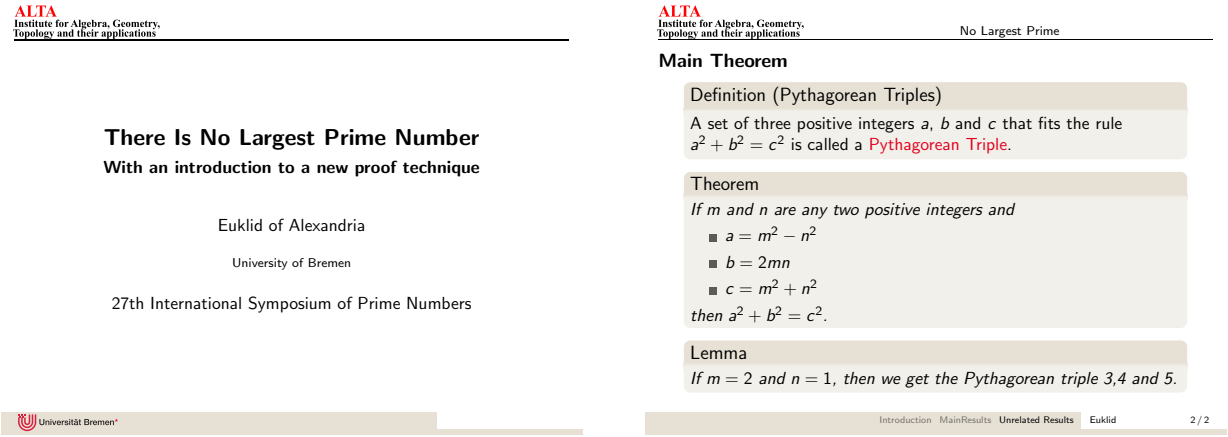
Keeping the above option `dvi` in mind, I have also prepared an easy-to-use combination of several different options und the declaration `standard` (a more detailed explanation can be found below).

Hence, you can just use

```
\usetheme[standard]{alta}
```

and have several options (`footlinesection`, `footlinenumber`, `footlineauthor`, `headlinetitle`, and `hideuniversity`) already included, as can be seen in the image below.

Example:



2 The outer theme

Following options can be given to control what is happening outside the frame:

- `noheadline`
  supresses the headline.
- `headlinetitle`
  shows the short version of the title in the middle of the headline.
- `hideinstitute`
  hides the institute logo from the second frame onwards and will shift the headline upwards. This involves a change in the headlineheight.
- `hideuniversity`
  hides the university logo from the second frame onwards.
- `nofootline`
  supresses the footline.
- `footlinesection`
  adds a navigation bar containing all (short versions of the) sections with the current section highlighted to the footline. A short version of a section title can be defined by the command `\section[short section title]{long section title}`.
- `footlineauthor`
  adds (the short version of) the name of the author to the footline. If no short version is given, the long version is used. The name is defined by `\author[short name]{long name}`.
- `footlinenumber`
  adds `<number of current frame/ total number of frames>` to the footline.

- `onesection`
  shows the current section and - if available - the name of the current subsection in the format `section : shortsection` in the footline. If no `subsection` is available it only shows the name of the `section`.

  This option is in conflict with the `footlinesection` option.

- `exzellenz`
  uses the starred version of the *university-logo* instead of the unstarred one. (See figure 1 on page 4 for a comparison.)
  Remark: In the examples shown in this document the starred version is still used!

- `standard`
  is a combination of several options for the ease of use and consists of `footlinesection`, `footlinenumber`, `footlineauthor`, `headlinetitle`, and `hideuniversity`.

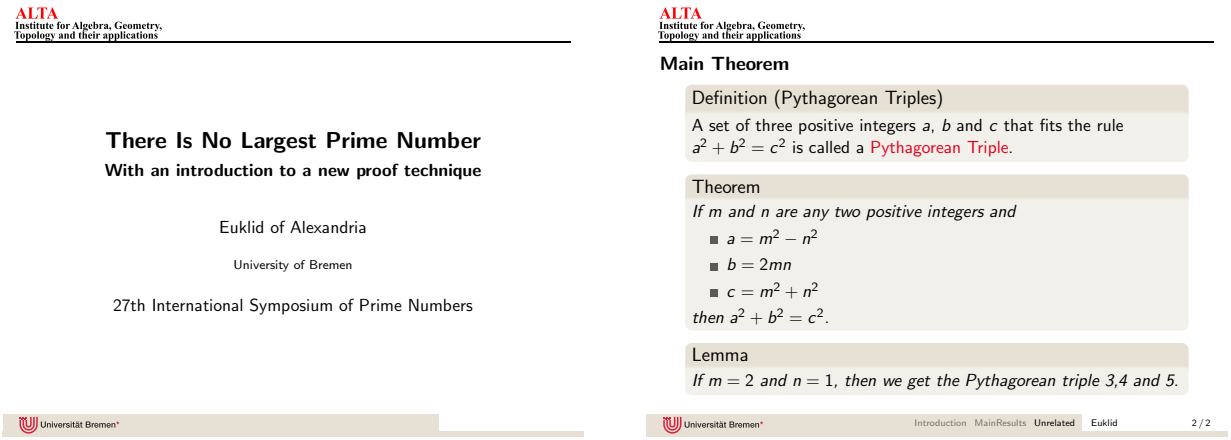
Unfortunately, if you want to disable just one option in the `standard` declaration, you have to declare each option you want to enable on its own. Thus the `standard` option is just a very limited combination of options.

The navigation line provided by the beamer class is supressed.

For example the output of the following declaration is shown below.

```
\usetheme[footlinesection,footlinenumber,footlineauthor]{alta}
```

Example:



(a) Unstarred version of the university logo. Used as standard.

(b) Starred version of the university logo (exzellenz initiative).

Figure 1: Comparison between the two different univeristy logos.

3 The inner theme

- `shadow`
  Boxes are shadowed.

- `itemshape=spec_shape`
  lets you specifiy the shape of the item objects. The predefined `spec_shapes` are the `bullet` (also accessible by `default`), `square`,`circle`, and `ball`. If the option is not given, then the *standard shape* is `circle`.

- `enumshape=spec_shape`
  lets you specifiy the shape of the enumeration objects. The predefined `spec_shapes` are the `default`, `square`,`circle`, and `ball`. If the option is not given, then the *standard shape* is `square`.

- `tocshape=spec_shape`
  lets you specifiy the shape of the objects in the table of contents. The predefined `spec_shapes` are the , `square` and `circle`, and ,`default` and `ball`. On the left is `tocshape=square`, on the right `tocshape=circle`. If the option is not given, then the *standard shape* is `square`.

- `tocshape=spec_shape`
  lets you specifiy the shape of the objects in the table of contents. The predefined `spec_shapes` are the , `square` and `circle`, and ,`default` and `ball`. On the left is `tocshape=default`, on the right `tocshape=ball`. If the option is not given, then the *standard shape* is `square`.

- `linkcolor=spec_color`
  colors all the (internal) links in the presentation with `spec_color`. These links are e.g. the title (headline), the current section (footline), the names in the tableofcontents, pagereferences and citations (for a sole coloring of the citations see `citecolor`).

- `urlcolor=spec_color`
  colors all the urls (`\url{...}`) in the presentation with `spec_color`.

- `citecolor=spec_color`
  colors all the citations in the presentation with `spec_color`. If used simultaneously with `linkcolor`, then the color specified with `citecolor` is used for citations.

4 Colors

Colors are always a delicate subject concerning presentations, especially beamer presentations. Because bright colors (like the Pantone `cool gray 1` used by the corporate design of the University Bremen) often appear to be too bright on many beamers, several options are provided to make the colors darker.

Following options can be used to control the appearance of `cool gray 1` in the ZeTeM theme:

- `bright`
  uses the colors as specified by the corporate design (and is the default option),

- `dim`
  is slightly darker,
- `dark`
  is somewhat more darker.

Furthermore there are more options

- `example`
  switches the color which is used for examples (a dark green) provided by the beamer class.
- `colortheorem`
  colors the environments `definiton`, `lemma` and `theorem` in slightly different colors based on the cool gray color of the above `bright`, `dim` and `dark`. (How to change those colors is explained below.)

By default the color for structure elements (e.g. the item bullets, the tables of contents, ...) is set to a darker color. To redefine the color used for structures use the color theme structure:

`\usecolortheme[<colordefinition>]{structure}.`

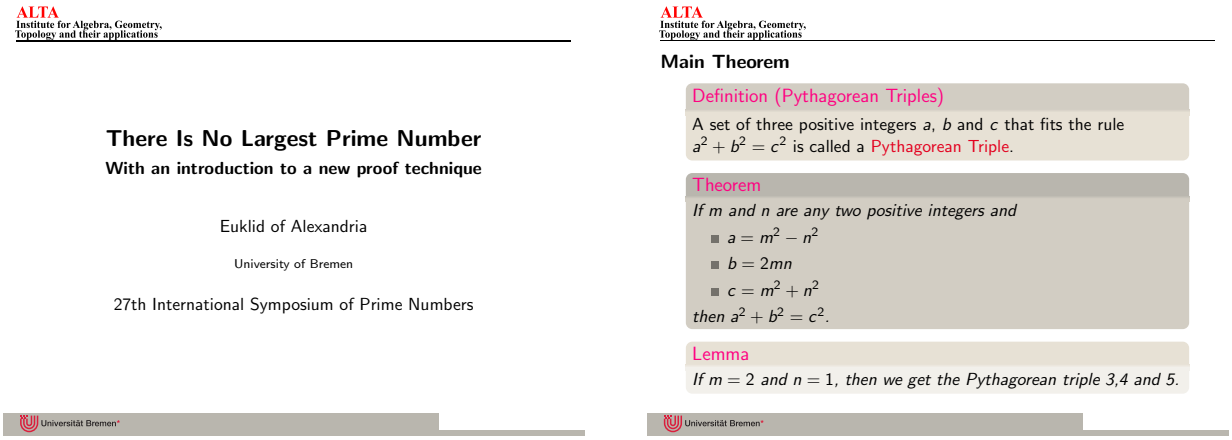
The color can be defined according to the color or xcolor package. For example use `\usecolortheme[named=black]{structure}` for black structures or `\usecolortheme[rgb={.5,0,.5}]{structure}` for a dark purple.

For example the declarations

```
\usetheme[dark,example]{ZeTeM}
\usecolortheme[rgb={1,0,.5}]{structure}
```

result in the following:

Example:



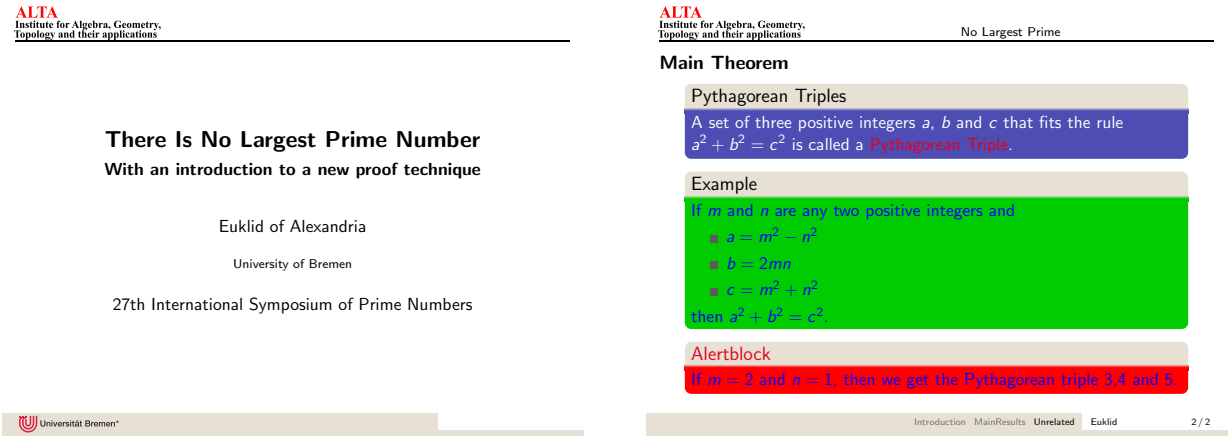
If you want to change the colors of main parts of the `block`, `example`, or `alert` environments you can use `\setbeamercolor{block body}{color assignment}`, `\setbeamercolor{block body example}{color assignment}`, or `\setbeamercolor{block body alerted}{color assignment}`.

For example the declarations

```
\usetheme[standard]{ALTA}
\setbeamercolor{block body}{fg=white,bg=blue!40!gray}
\setbeamercolor{block body alerted}{fg=blue,bg=red}
\setbeamercolor{block body example}{fg=blue,bg=green!80!black}
```

result in the following:

Example:



The environments `definition`, `lemma`, and `theorem` inherit the style from the `block` environment. If you want to change the colors of the environments theorem, lemma and definitions separately you use the following command, shown for the `theorem` environment.

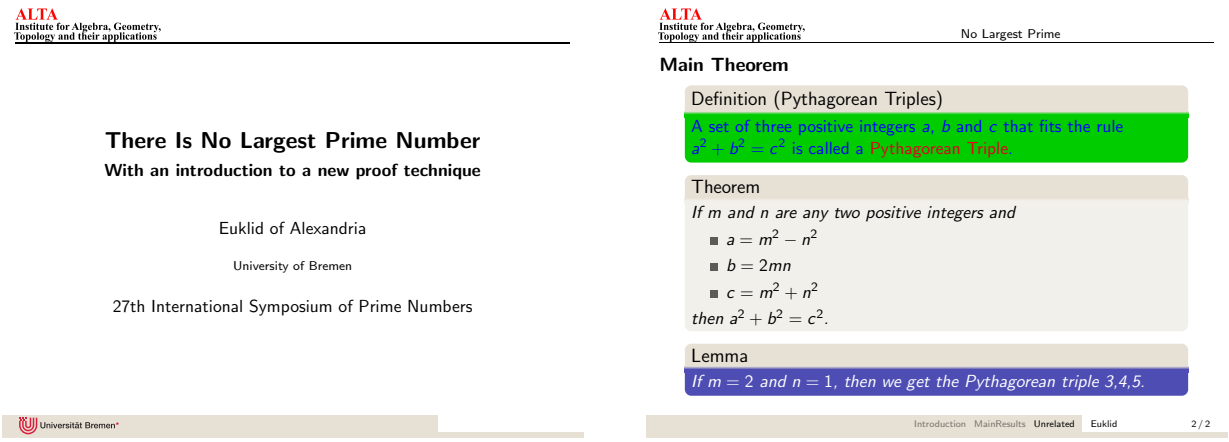
```
\let\OLDtheorem=\theorem
\def\theorem{%
  \setbeamercolor{block title}{color assignment}%
  \setbeamercolor{block body}{color assignment}%
  \OLDtheorem
}
```

Thus the following declarations

```
\usetheme[standard]{ALTA}
\let\OLDdefinition=\definition
\def\definition{%
  \setbeamercolor{block body}{fg=blue,bg=green!80!black}%
  \OLDdefinition
}
\let\OLDlemma=\lemma
\def\lemma{%
  \setbeamercolor{block body}{fg=white,bg=blue!40!gray}%
  \OLDlemma
}
```

result in the following:

Example:



For an more detailed example, see appendix B.

5 Combination with other themes

5.1 Color themes

It is strongly recommended not to change the color theme (one could even say "forbidden") though this causes everything to look really weird. Just try `\usecolortheme{albatross}`, for example, and you will see . . . If you need a more detailed tuning of the colors, you have to get into the color management of the beamer class and redefine the color templates in the way you like it (see [1], Chapter 17).

5.2 Font themes

The University Bremen has chosen the font Helvetica as corporate design font. Nevertheless Lorenz and Breides decided not to fix Helvetica as the only possibility for the **ALTA** theme (one reason is the poor math typesetting of Helvetica another one is that Helvetica looks bad in combination with other fonts).

By default the Computer Modern Font Sans Serif is used inside the frames.

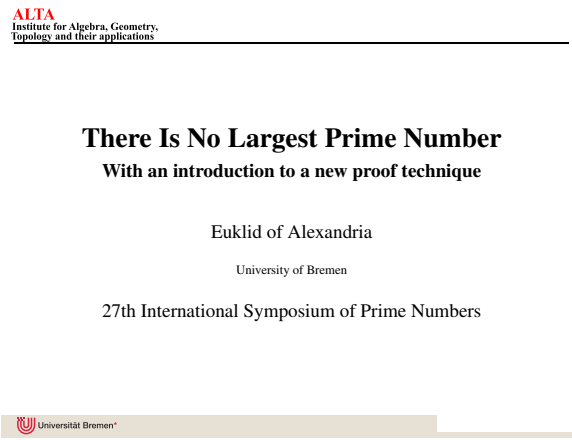
It is possible to combine the **ALTA** theme with other fonts themes from the beamer class like `serif` or `structureitalicserif`. To change the overall fontsize use `\documentclass[xpt]{beamer}`. For more information on fonts have a look at [1] Section 5.6 and Chapter 18.

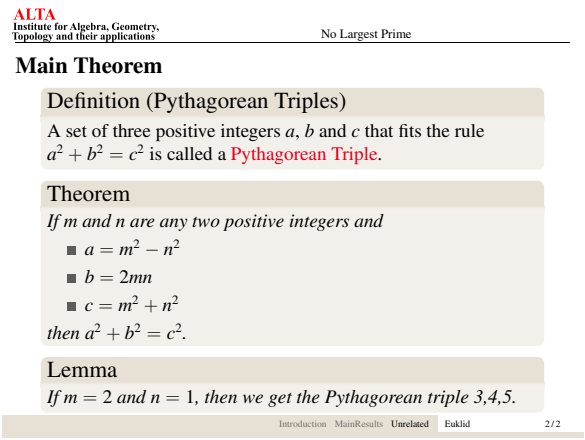
For example the declaration

```
\documentclass[12pt]{beamer}
\usepackage{times}
\usetheme[standard]{ALTA}
\usefonttheme{serif}
```

result in the following:

Example:





6 Behind the scenes

I decided to follow the data structure of the `ZeTeM` theme which in turn follows the data structure of the beamer class for the implementation of the `ALTA` theme. Though we provide the following files:

The color theme `alta`: This color theme provides the different versions of Pantone `cool gray 1` controlled by the options `bright`, `dim` and `dark` and the official HSK 15 red as alert color.

The outer theme `alta` : This outer theme draws the footline and the headline according to the options shown in the first section.

The theme `ALTA`: This theme only combines the color theme `alta`, the outer theme `alta` and the inner theme `alta`. Furthermore if defines several other settings like e.g. `colortheorem`.

Furthermore, the images used for the institute logo and the university logo are defined here.

References

[1] Till Tantau, *User's Guide to the Beamer Class*, Version 3.33, `https://bitbucket.org/rivanvx/beamer/wiki/Home`, get the document at `http://ctan.math.utah.edu/ctan/tex-archive/macros/latex/contrib/beamer/doc/beameruserguide.pdf`, 2004

[2] Dirk Lorenz, Kristan Bredies, *ZeTeM Theme for the Beamer Class*, Zentrum für Technomathematik, Universit"at Bremen, 2005, `http://www.informatik.uni-bremen.de/cms/detail.php?id=9637&detail=alternate` or `http://www.informatik.uni-bremen.de/cms/media.php/59/beamerZeTeMdoc.pdf`

Index

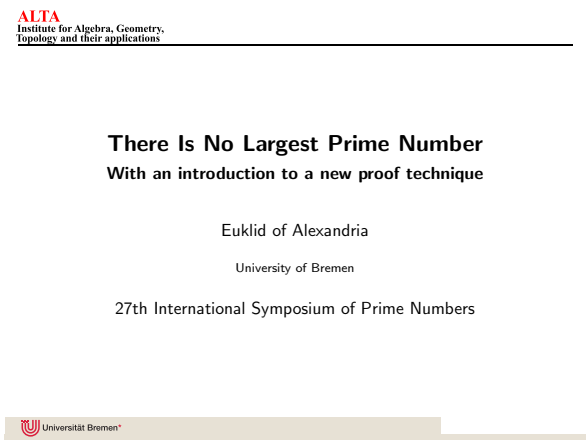
An index listing the different `options` you can use in the `alta` theme.

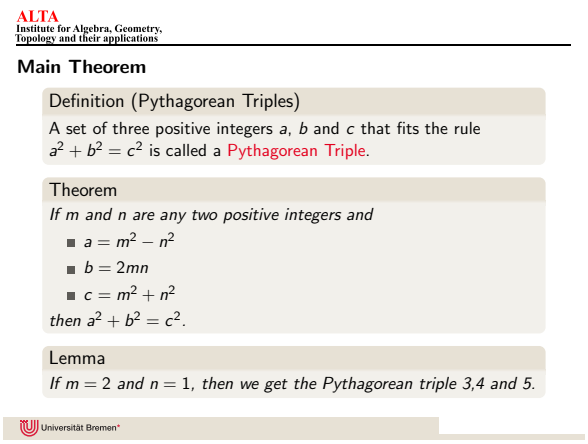
A Visual Examples

A.1 Outer Style

`\usetheme[]{alta}`

Example:

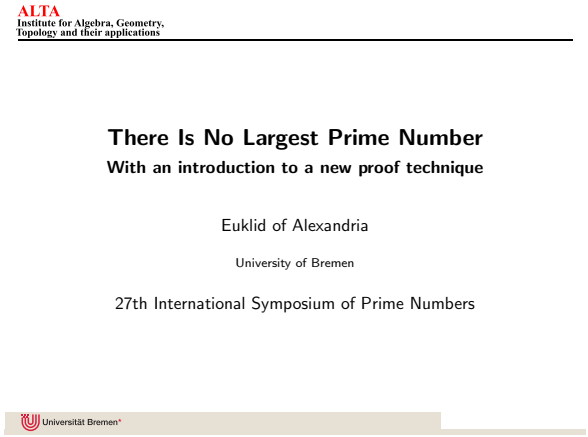


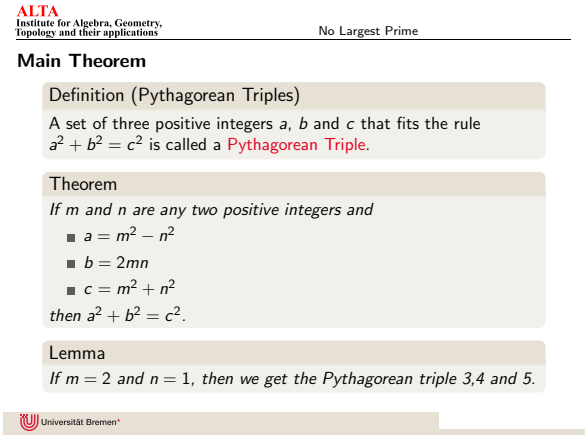


Without using any options for the theme.

`\usetheme[headlinetitle]{alta}`

Example:

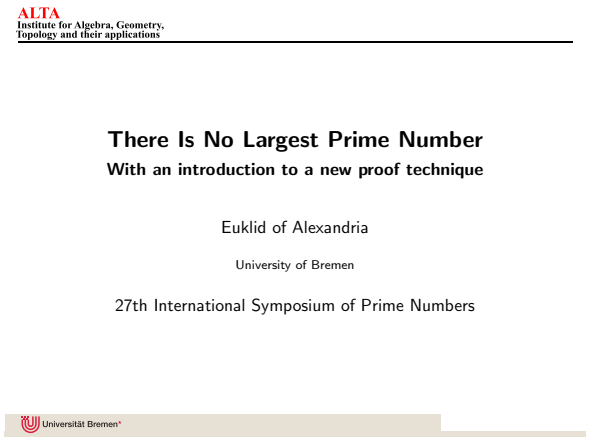


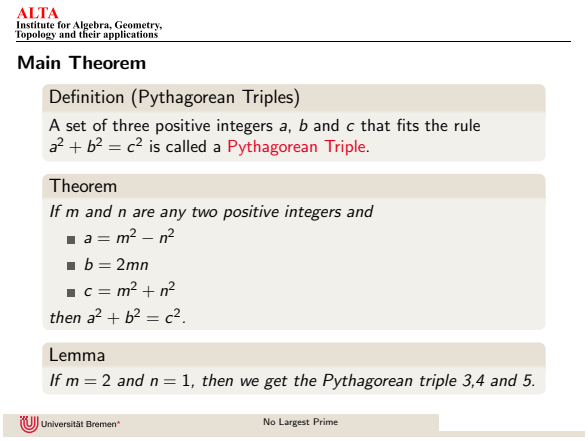


Shows the *\title* of the presentation in the headline. If you're using *\title[short title]{long title}* then *short title* is used.

`\usetheme[footlinetitle]{alta}`

Example:

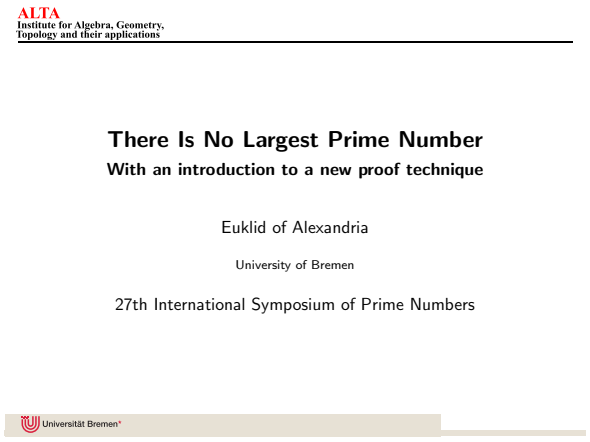


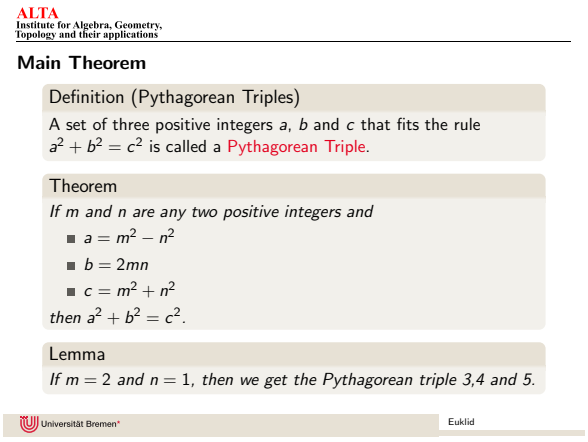


Shows the *\title* of the presentation in the footline. If you're using *\title[short title]{long title}* then *short title* is used.

`\usetheme[footlineauthor]{alta}`

Example:

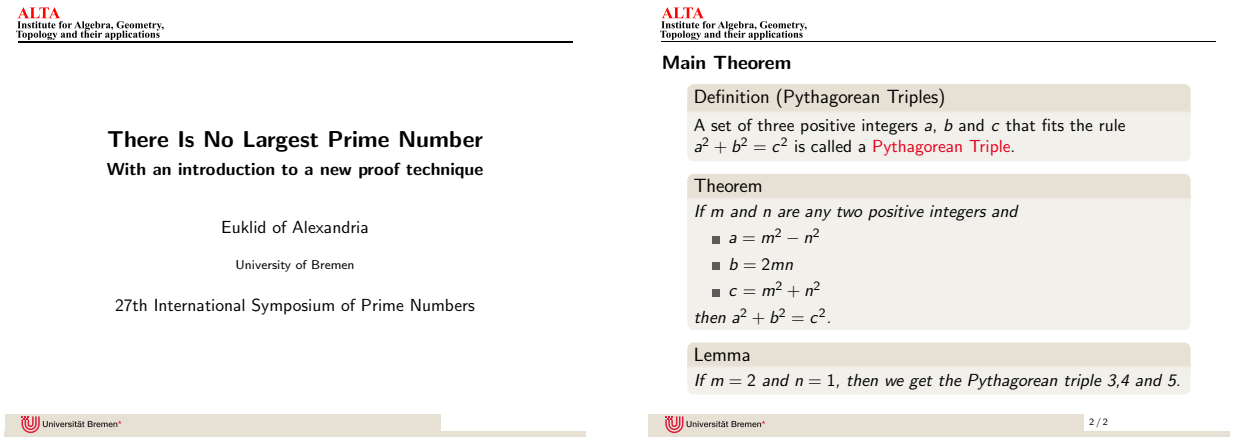




Shows the *\author* of the presentation in the footline. If you're using *\author[short authorname]{long authorname}* then *short authorname* is used.

```
\usetheme[footlinenumber]{alta}
```

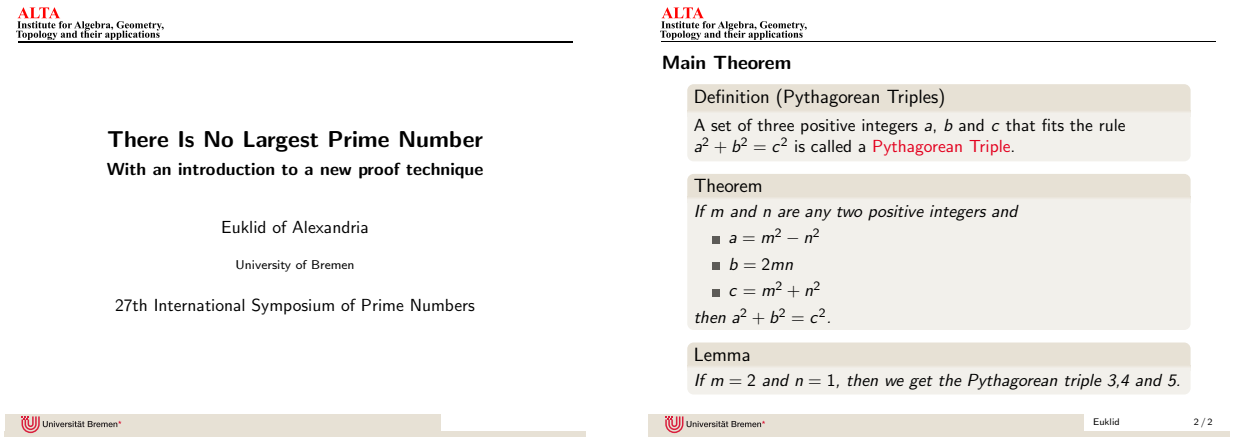
Example:



Show the current *framenumber* in the footline. When used without *footlineauthor* it is slightly shifted to the left.

```
\usetheme[footlineauthor,footlinenumber]{alta}
```

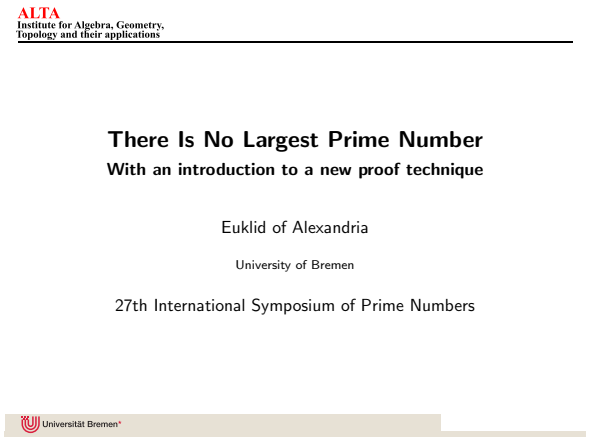
Example:

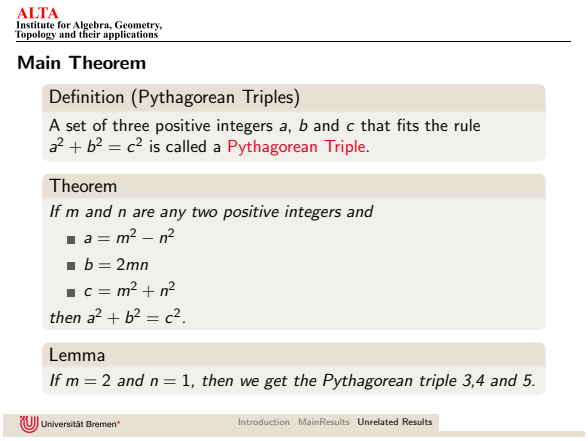


When *footlineauthor* and *footlinenumber* are used together, footlinenumber is shifted to the right border of the frame.

`\usetheme[footlinesection]{alta}`

Example:

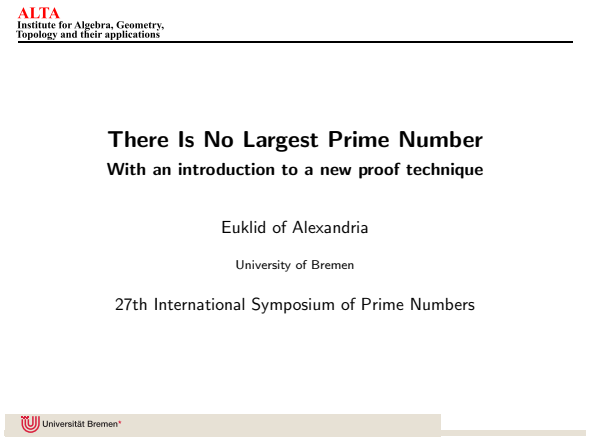


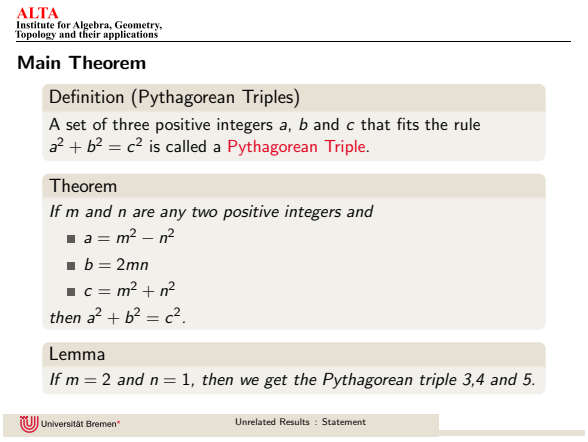


Shows the *\section* of the presentation in the footline. If you're using *\section[short section]{long section}* then *short section* is used.

`\usetheme[onesection]{alta}`

Example:

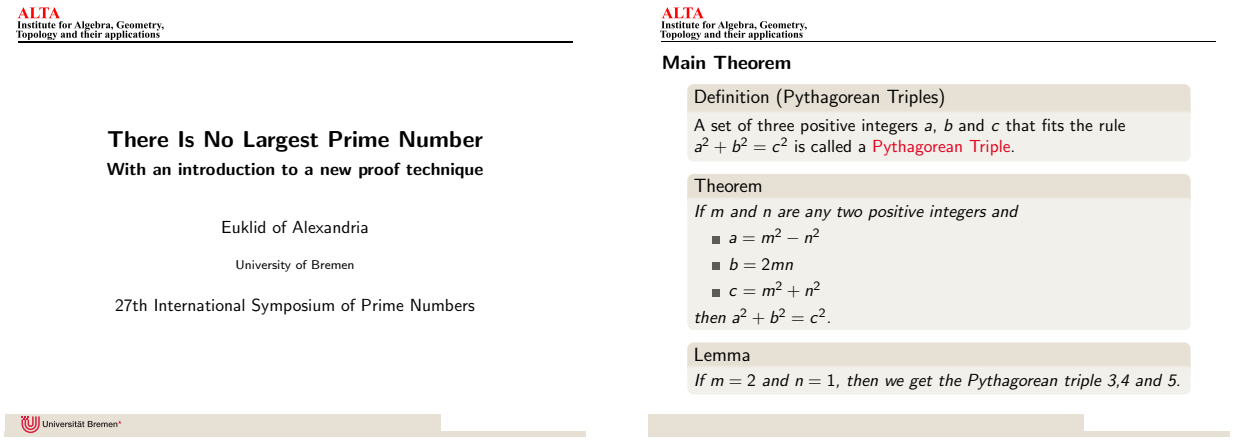




Shows the current *section* and if available the current *subsection* in the format *section* : *currentsection*. Here it always uses the "'longer"' version of section or subsection.

`\usetheme[hideuniversity]{alta}`

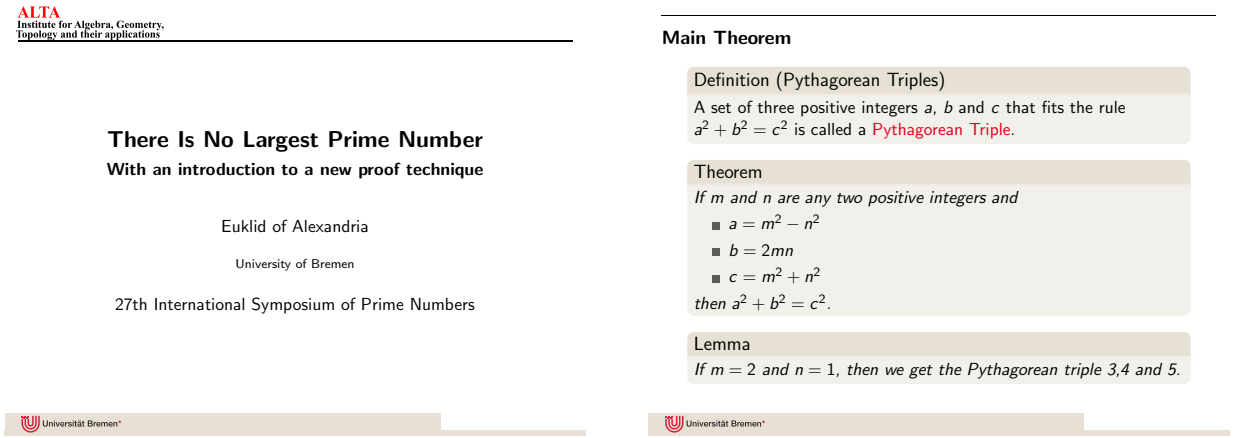
Example:



Hides the university logo from the second frame onwards.

`\usetheme[hideinstitute]{alta}`

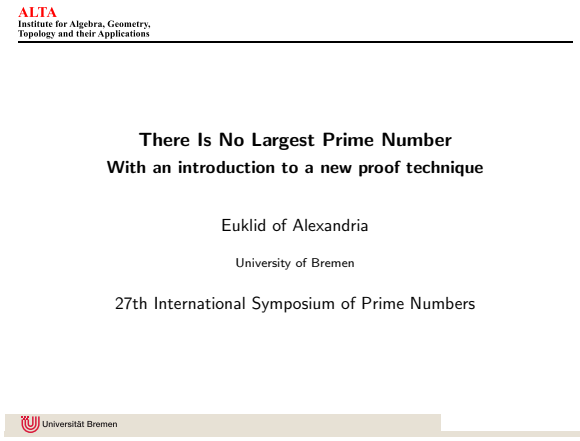
Example:

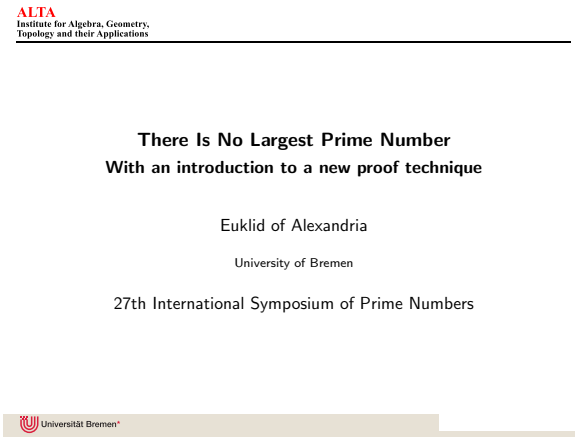


Hides the institute logo from the second frame onwards and shifts the headline upwards.

```
\usetheme[exzellenz]{alta}
```

Example:

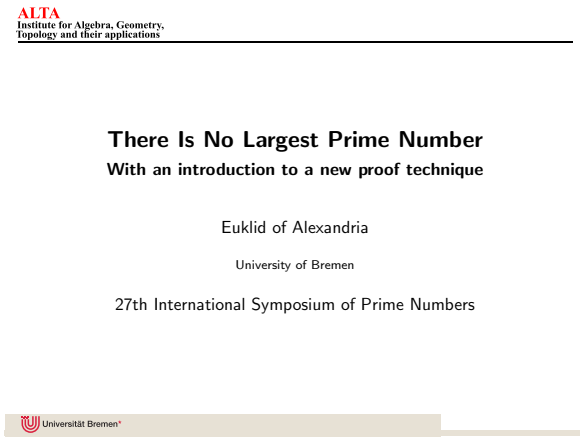


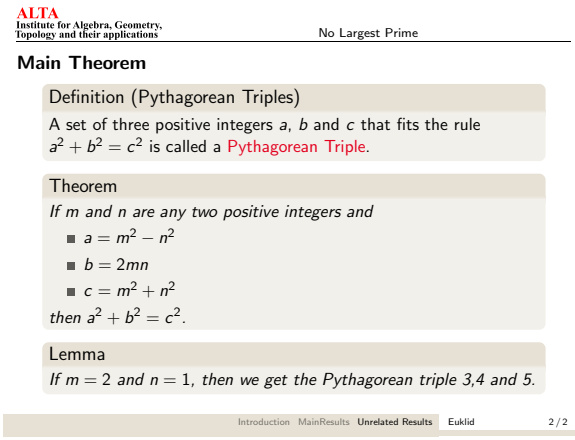


Changes the university logo from the standard unstarred one (left image) to the one of the exzellence initiative (right image). For a better comparison, see figure 1 on page 4.

```
\usetheme[standard]{alta}
```

Example:



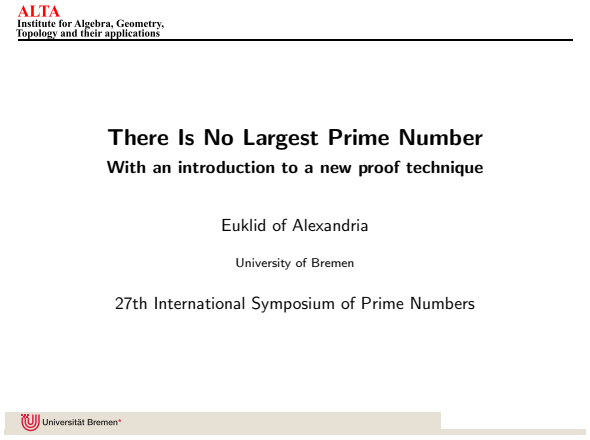


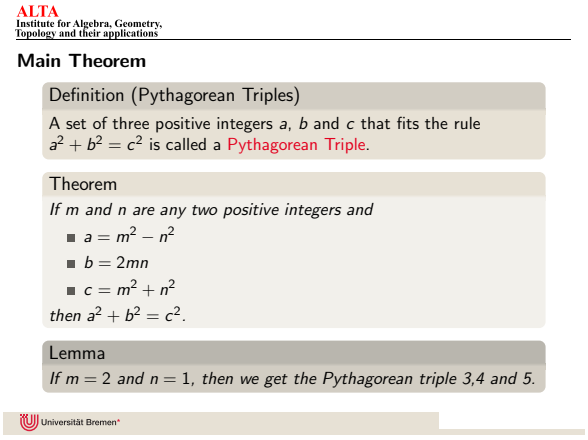
Combines the options *headlinetitle*, *footlineauthor*, *footlinenumber*, *footlinesection*, and *hideuniversity*. Thus making the code easier accesible.

A.2 Color Style

`\usetheme[colortheorem]{alta}`

Example:

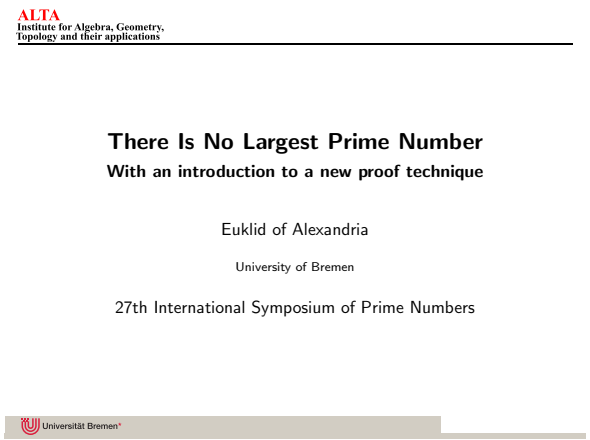


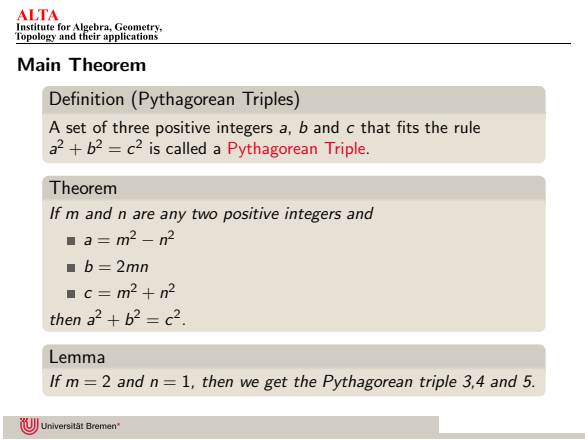


Changes the colours of the *theorem*, *lemma* and *definition* environments depending on the currently selected colortheme (see the next two examples).

`\usetheme[dim]{alta}`

Example:

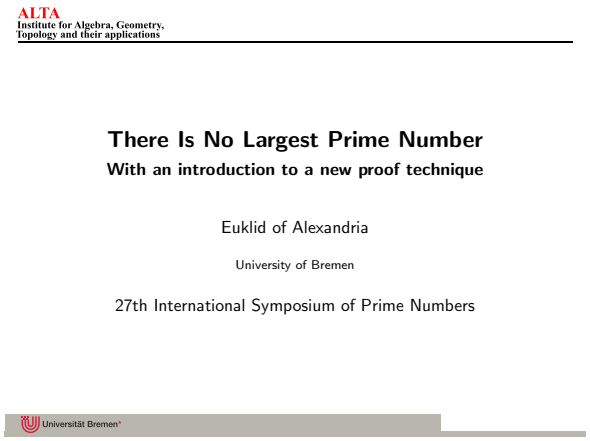


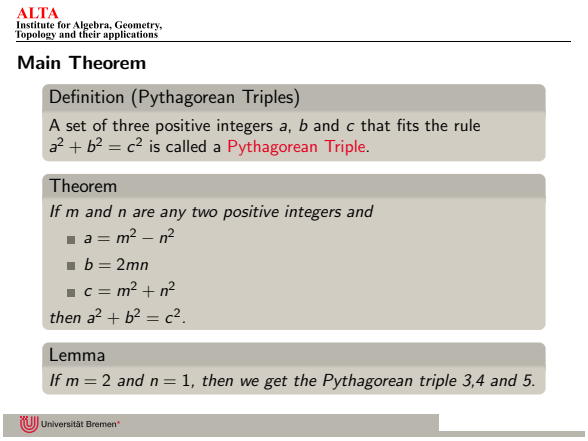


Changes the colortheme to an slightly darker one.

```
\usetheme[dark]{alta}
```

Example:



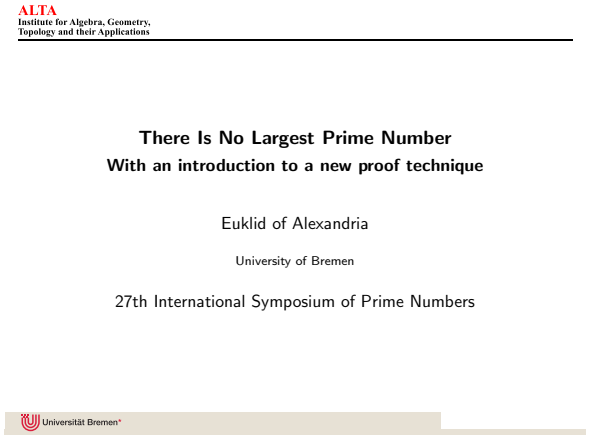


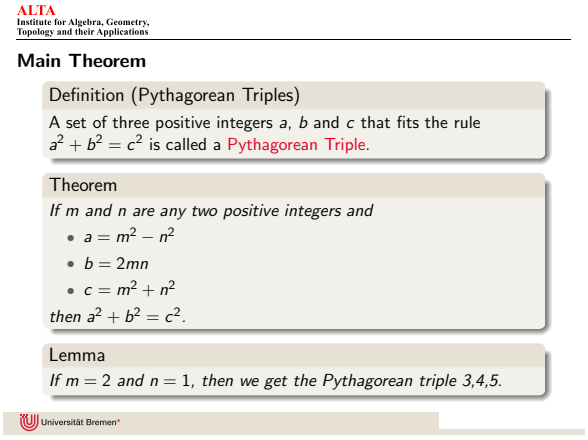
Changes the colortheme to a darker one.

A.3 Inner Style

`\usetheme[shadow]{alta}`

Example:

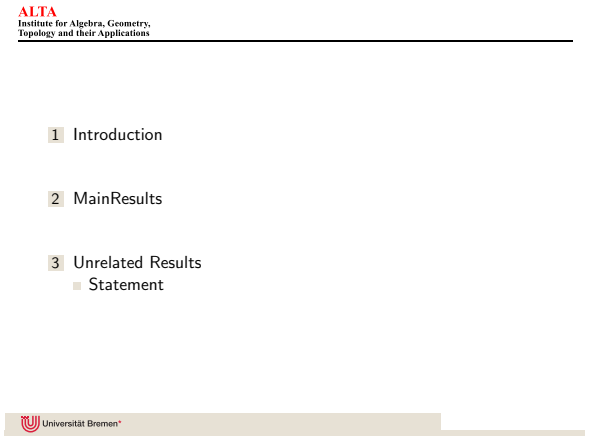


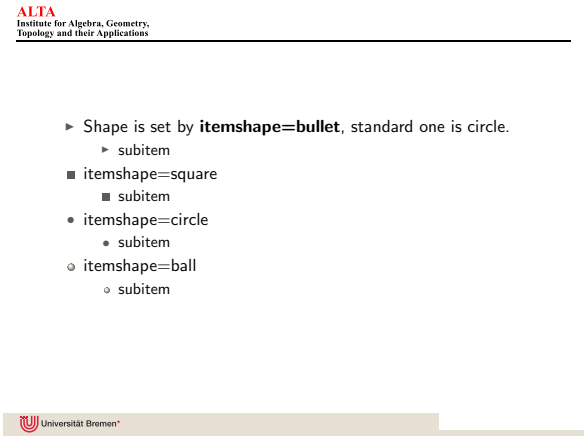


Boxes are shadowed.

`\usetheme[itemshape=bullet]{alta}`

Example:

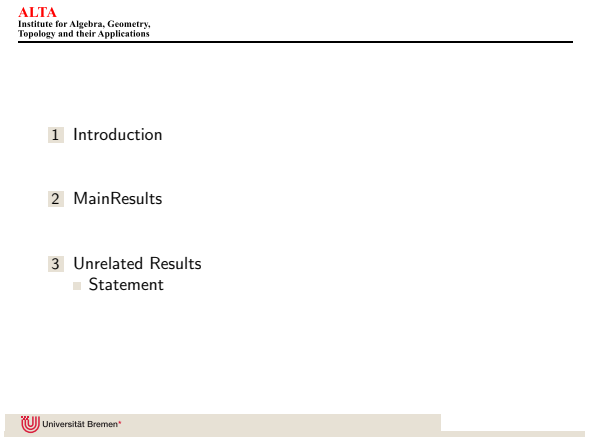


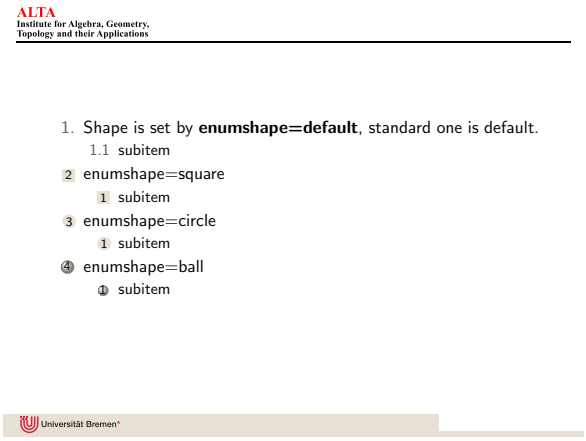


`itemshape=spec_shape` lets you specifiy the shape of the item objects. The predefined `spec_shapes` are the `bullet` (also accessible by `default`), `square`,`circle`, and `ball`. If the option is not given, then the *standard shape* is `circle`.

`\usetheme[enumshape=default]{alta}`

Example:

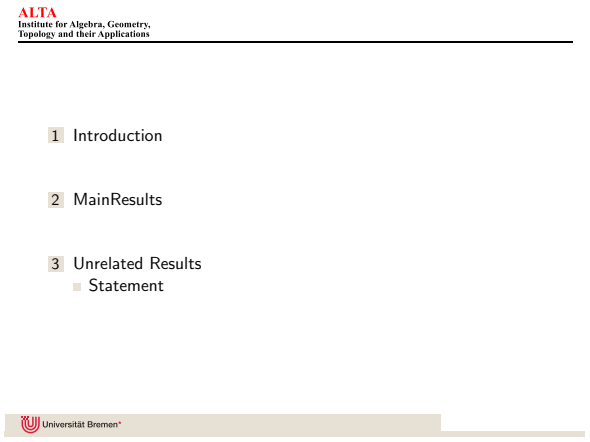


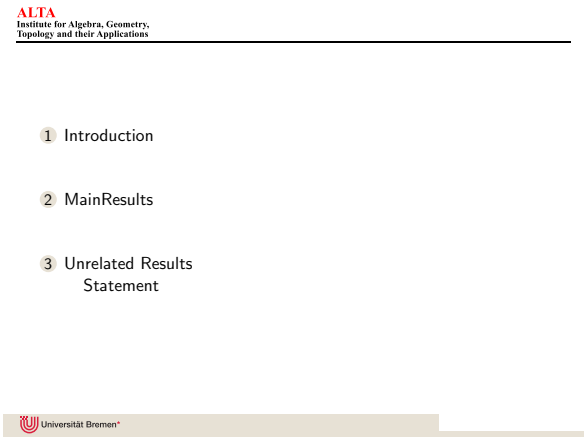


`enumshape=spec_shape` lets you specifiy the shape of the enumeration objects. The predefined `spec_shapes` are the `default`, `square`,`circle`, and `ball`. (All shown in the images above.) If the option is not given, then the *standard shape* is `square`.

`\usetheme[tocshape=square]{alta}`

Example:

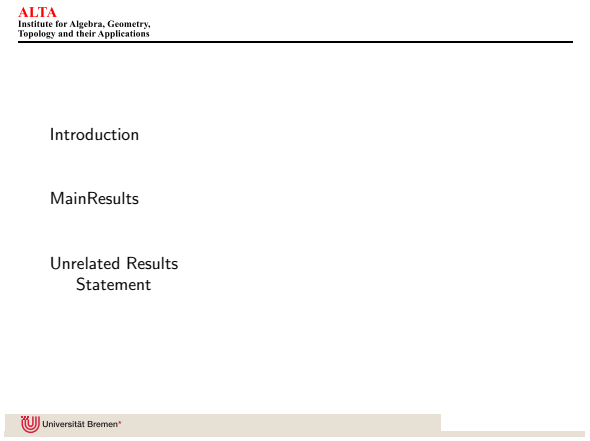


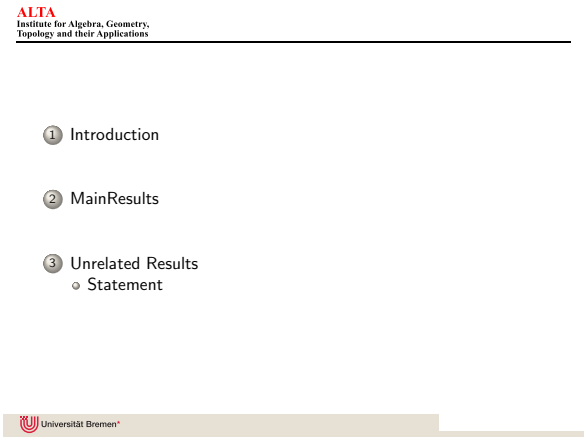


`tocshpae=spec_shape` lets you specifiy the shape of the objects in the table of contents. The predefined `spec_shapes` are the , `square` and `circle`, and ,`default` and `ball`. (First two shown above, the latter below.) On the left is `tocshape=square`, on the right `tocshape=circle`. If the option is not given, then the *standard shape* is `square`.

```
\usetheme[tocshape=default]{alta}
```

Example:

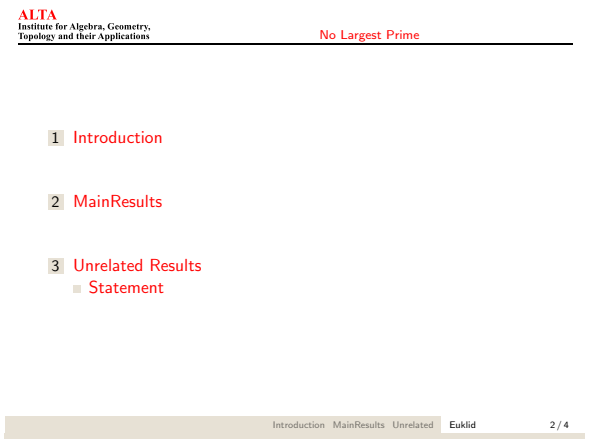


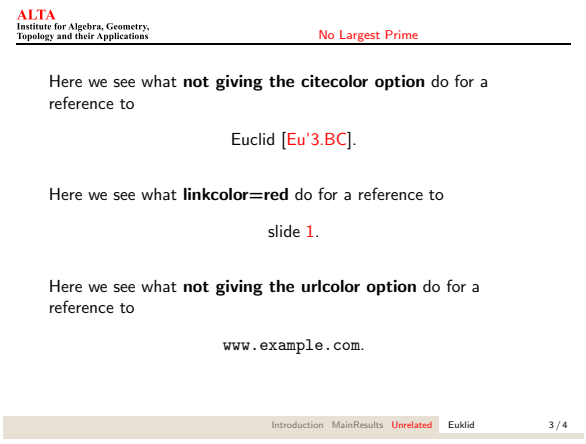


`tocshpae=spec_shape` lets you specifiy the shape of the objects in the table of contents. The predefined `spec_shapes` are the , `square` and `circle`, and ,`default` and `ball`. On the left is `tocshape=default`, on the right `tocshape=ball`. If the option is not given, then the *standard shape* is `square`.

```
\usetheme[standard, linkcolor=red]{alta}
```

Example:

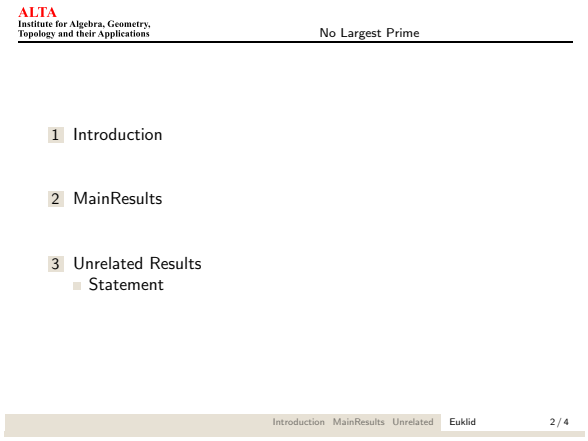


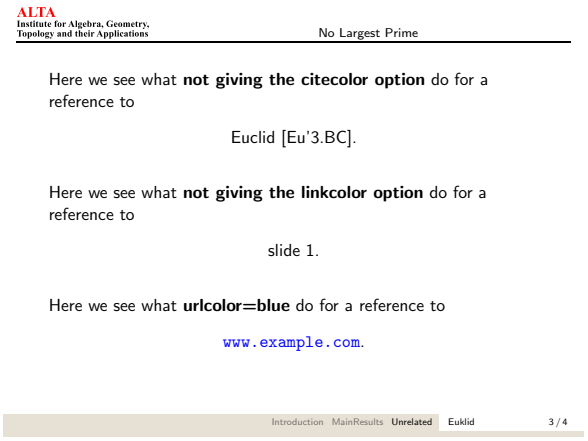


`linkcolor=spec_color` colors all the (internal) links in the presentation with `spec_color`. These links are e.g. the title (headline), the current section (footline), the names in the tableofcontents, pagereferences and citations (for a sole coloring of the citations see `citecolor`).

```
\usetheme[standard, urlcolor=blue]{alta}
```

Example:

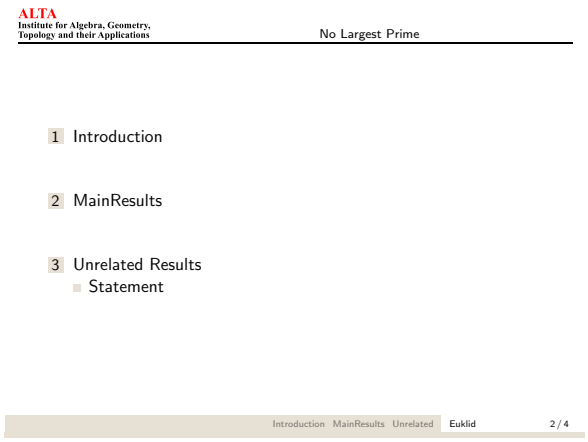


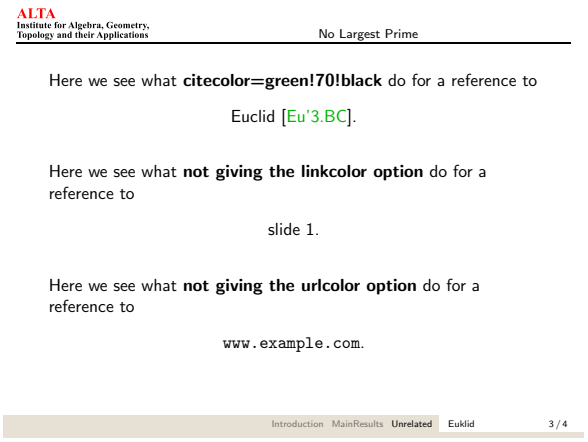


`urlcolor=spec_color` colors all the urls (`\url{...}`) in the presentation with `spec_color`.

```
\usetheme[standard, citecolor=green!70!black]{alta}
```

Example:

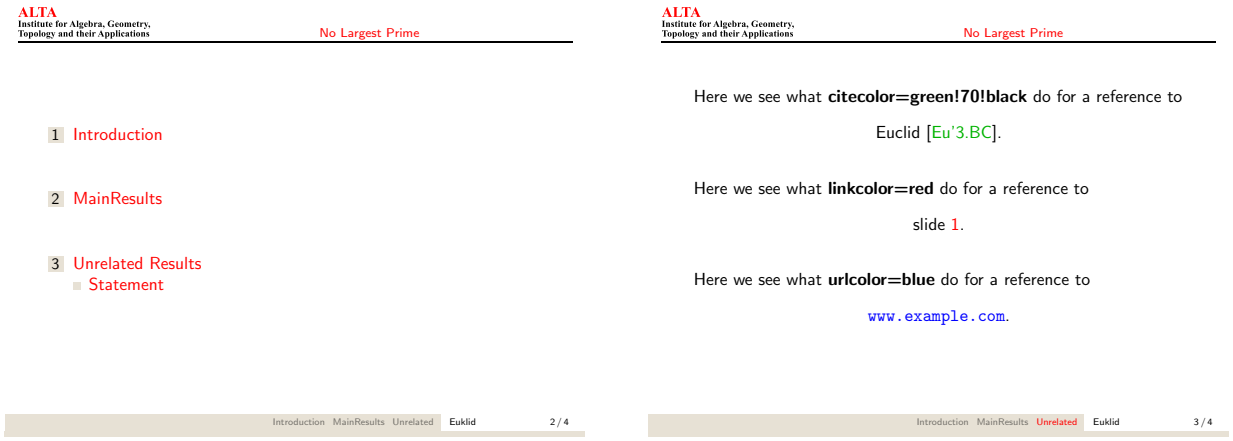




`citecolor=spec_color` colors all the citations in the presentation with `spec_color`. If used simultaneously with `linkcolor`, then the color specified with `citecolor` is used for citations (see below).

```
\usetheme[standard, citecolor=green!70!black,linkcolor=red,urlcolor=blue]{alta}
```

Example:



Interplay between the color specifications by `citecolor`, `linkcolor` and `urlcolor`. Citations are colored by `citecolor`, even though `linkcolor` would normally color it.

B Color assignment of `theorem`, `lemma` and `definition`

In the case that the option `colortheorem` is enabled, the following code is set

```
\let\OLDtheorem=\theorem
\def\theorem{%
  \setbeamercolor{block title}{bg=coolgray 1,fg=structure.fg}%
  \setbeamercolor{block body}{bg=primary}%
  \OLDtheorem
}
\let\OLDdefinition=\definition
\def\definition{%
  \setbeamercolor{block title}{bg=coolgray 2,fg=structure.fg}%
  \setbeamercolor{block body}{bg=primary 2}%
  \OLDdefinition
}
\let\OLDlemma=\lemma
\def\lemma{%
  \setbeamercolor{block title}{bg=coolgray 3,fg=structure.fg}%
  \setbeamercolor{block body}{bg=primary 3}%
  \OLDlemma
}
```

Here the colors `coolgray 1`, `coolgray 2`. `coolgray 3` (and `primary 1`. `primary 2` and `primary 3` resp.) refer to the colors used in the colorthemes `bright`, `dim` and `dark` but the assignment changes depending on the chosen colortheme.

C List of provided files

1. `ALTA-BeamerClass-Documentation.pdf`
2. `beamerthemeALTA.sty`
3. `beamercolorthemealta.sty`
4. `beamerinnerthemealta.sty`
5. `beamerouterthemealta.sty`
6. `beamertheme_pics` (folder)
   (a) `alta-logo.eps`
   (b) `alta-logo.pdf`
   (c) `unilogo-exzellent.eps`
   (d) `unilogo-exzellent.pdf`
   (e) `unilogo.eps`
   (f) `unilogo.pdf`

D Changelog

v.1.0 → v.1.1

- New option `exzellenz` implemented which results in the *university logo* with the exzellenz star to be used. If the option is not given, the *normal* university-logo (unstarred) is used! The example pictures in the document file are not updated.