Metrop... LSHTM

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Outline



- 1 Introduction
- 2 Title formats
- 3 Elements
- 4 Conclusion

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Metropolis



The **metropolis** theme is a Beamer theme with minimal visual noise inspired by the hsrm Beamer Theme by Benjamin Weiss.

Enable the theme (in ETEX) by loading

```
\documentclass{beamer}
\usetheme{metropolis}
```

Note, that you have to have Mozilla's *Fira Sans* font and XeTeX installed to enjoy this wonderful typography.

In R you can of course use this package directly, see its documentation.

This vignette actually uses Ishtm theme, which needs the Carlito font (just Google it).

Sections



Sections group slides of the same topic

Elements

for which ${\bf metropolis}$ provides a nice progress indicator \dots

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Metropolis title formats



metropolis supports 4 different title formats:

- Regular
- Small caps
- all small caps
- ALL CAPS

They can either be set at once for every title type or individually.

Small caps not working with the font used in the **Ishtm** theme.

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Typography



The theme provides sensible defaults to \emph{emphasize} text, \alert{accent} parts or show \textbf{bold} results.

becomes

The theme provides sensible defaults to *emphasize* text, accent parts or show **bold** results.

Font feature test



- Regular
- Italic (also Italic)
- Small Caps
- Bold (also Bold)
- Bold Italic (also Italic)
- Bold Small Caps
- Monospace
- Monospace Italic
- Monospace Bold
- Monospace Bold Italic

Lists



Items

- Milk
- Eggs
- Potatoes

Enumerations

- 1 First,
- 2 Second and
- 3 Last.

Descriptions

PowerPoint Meeh.

Beamer Yeeeha.



■ This is important

This uses &TeX for animation. The next slides uses RMarkdown



- This is important
- Now this



- This is important
- Now this
- And now this

This uses $\ensuremath{\text{ME}}\xspace$ X for animation. The next slides uses RMarkdown



- **■** This is really important
- Now this
- And now this

This uses LATEX for animation. The next slides uses RMarkdown

Animation (using RMarkdown, plus one ETEX trick)



■ This is important

Animation (using RMarkdown, plus one ETFX trick)



- This is important
- Now this

Animation (using RMarkdown, plus one ETEX trick)



- This is important
- Now this
- And now this

Animation (using RMarkdown, plus one ETFX trick)



- This is really important
- Now this
- And now this



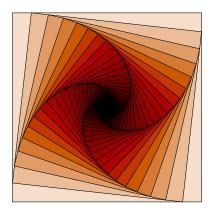


Figure 1: Rotated square from texample.net.

This used a KTEX feature. All RMarkdown features are also at our disposal.



Table 1: Largest cities in the world (source: Wikipedia)

| Population |
|------------|
| 20,116,842 |
| 19,210,000 |
| 15,796,450 |
| 14,160,467 |
| |

This used a KTEX feature. All RMarkdown features are also at our disposal.



Three different block environments are pre-defined and may be styled with an optional background color.

| Default | Default |
|----------------|----------------|
| Block content. | Block content. |

| Alert | Alert |
|----------------|----------------|
| Block content. | Block content. |
| | |

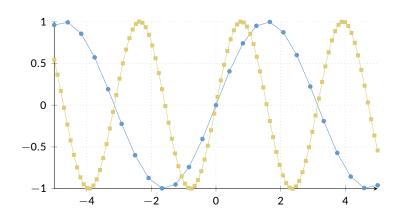
| Example | Example |
|----------------|----------------|
| Block content. | Block content. |

The right side uses the \metroset{block=fill} option, but this is a metropolis option: not really working with lshtm theme. Blocks can also used in Markdown using ### (if slide-level=2).

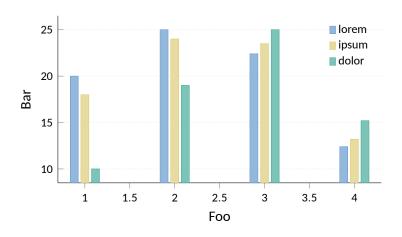


$$e = \lim_{n \to \infty} \left(1 + \frac{1}{n}\right)^n$$











Veni, Vidi, Vici

References



Some references (Knuth, 1992; Graham et al., 1989; Simpson, 2003; Erdős, 1995; Greenwade, 1993)

allowframebreaks is not used or needed, also changed \cite to \citep, and defaulted natbib to option [round].



Notes can be added either using latex syntax:

```
\note{
  \begin{itemize}
    \item \emph{This} is a note.
  \end{itemize}
or with pandoc (markdown) syntax:
<div class = "notes">
  - This is *another* note.
</div>
```

The display of the notes is controlled using the YAML argument beameroption. Here we have used beameroption: "show notes".

-Elements

-Notes

\item \emph{This} is a note. or with pandoc (markdown) syntax: beameroption. Here we have used beameroption: "show notes".

- This is a note.
- This is another note.

Notes can be added either using latex syntax:

\begin{itemize} \end{itemize}

\note1

cdiv class - "notes">

- This is *another* note. </div>

The display of the notes is controlled using the YAML argument

Colortheme (with Ishtm theme)



The **Ishtm** theme has three colortheme:

- lshtmgreen (default)
- lshtmlightgreen
- lshtmreverse

Simply set the colortheme: lshtmreverse option in the YAML header of your markdown document.

Aspect ratio (with Ishtm theme)



Like other themes, the aspect ratio can be set to 16/9 by setting classoption: aspectratio=169 in the YAML header.

But to get a correct title page, you also need to set

titlepage: titlepage169.png.

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Get the source of this theme and the demo presentation from

https://github.com/matze/mtheme

The theme *itself* is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License



Source and documentation for the RMarkdown variant are at https://github.com/eddelbuettel/binb.

Questions?

Backup slides



Sometimes, it is useful to add slides at the end of your presentation to refer to during audience questions.

The best way to do this is to include the appendixnumberbeamer package in your preamble and call \appendix before your backup slides.

metropolis will automatically turn off slide numbering and progress bars for slides in the appendix.

Calling \appendix currently leads to an error in when using binb. Neither with lshtm.

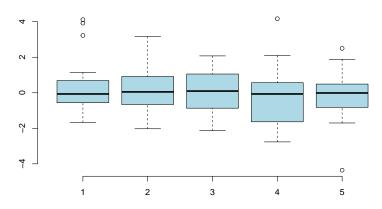


The following code generates the plot on the next slide (taken from help(bxp) and modified slightly):

R Appendix: R Figure Example



Example from help(bxp)



R Appendix: R Table Example



A simple knitr::kable example:

Table 2: (Parts of) the mtcars dataset

| | mpg | cyl | disp | hp | drat | wt | qsec | VS |
|-------------------|------|-----|------|-----|------|-------|-------|----|
| Mazda RX4 | 21.0 | 6 | 160 | 110 | 3.90 | 2.620 | 16.46 | 0 |
| Mazda RX4 Wag | 21.0 | 6 | 160 | 110 | 3.90 | 2.875 | 17.02 | 0 |
| Datsun 710 | 22.8 | 4 | 108 | 93 | 3.85 | 2.320 | 18.61 | 1 |
| Hornet 4 Drive | 21.4 | 6 | 258 | 110 | 3.08 | 3.215 | 19.44 | 1 |
| Hornet Sportabout | 18.7 | 8 | 360 | 175 | 3.15 | 3.440 | 17.02 | 0 |

- P. Erdős. A selection of problems and results in combinatorics. In *Recent trends in combinatorics (Matrahaza*, 1995), pages 1–6. Cambridge Univ. Press, Cambridge, 1995.
- R. Graham, D. Knuth, and O. Patashnik. *Concrete mathematics*. Addison-Wesley, Reading, MA, 1989.
- G. D. Greenwade. The Comprehensive Tex Archive Network (CTAN). *TUGBoat*, 14(3):342–351, 1993.
- D. Knuth. Two notes on notation. *Amer. Math. Monthly*, 99:403–422, 1992.
- H. Simpson. Proof of the Riemann Hypothesis. preprint (2003), available at http://www.math.drofnats.edu/riemann.ps, 2003.