



Lorenz System

Solving Lorenz System Using
Various Numerical Methods

April 24, 2022



Overview

1. Introduction

2. Layout

3. Elements

4. Conclusion

The background of the slide is composed of two large, overlapping geometric shapes. A teal-colored shape occupies the top-left corner, while a light gray shape occupies the bottom-left corner. The rest of the slide is white. The word "Introduction" is centered in the white area.

Introduction

Introduction



- ▶ Lorenz Equations are a set of ordinary differential equations which gives chaotic solutions for certain parameter values and initial conditions.
- ▶ The equations have three variable parameters along with initial conditions.
- ▶ Lots of convenient options to tweak the design



Layout



Layout

Layout variations

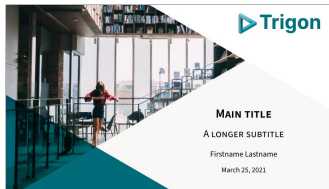
The general style for the title, section and regular frames can be changed easily with simple options. Here are some examples for the title page



plain



style1



style2 (default)



Layout

Fonts

This theme is using *Source Sans Pro* font for all elements by default. This can be disabled by providing the option `usesourcefonts=false`.

Emphasis can be added by using **bold** typeface, *italic*, **alert** or **simple colors**.

Equations are typesetted with this font as well

$$F(x|\mu, s) = \int_{-\infty}^x s^{-1} \left(1 + e^{-\frac{v-\mu}{s}}\right)^{-2} e^{-\frac{v-\mu}{s}} dv = \frac{1}{1 + e^{-\frac{x-\mu}{s}}}$$

The background of the slide is composed of three geometric sections. A teal-colored triangle is in the top-left corner. A light gray triangle is in the bottom-left corner. The remaining area is a white trapezoid. The word "Elements" is centered within the white area.

Elements

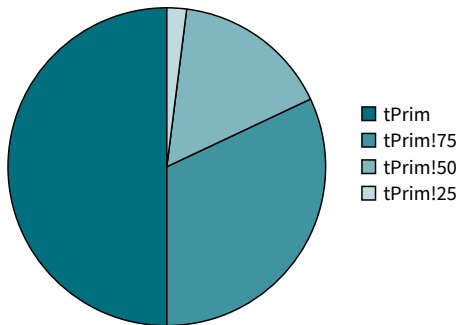


Elements

Charts

Use the theme color `tPrim`, `tSec`, `tGrey` and `tAccent` to have charts directly fit the main theme of presentation.

- Easy variants using `color!x` to lighten or darken the colors





Elements

Lists

Items

- ▶ Item 1
 - ▶ Subitem 1
 - ▶ Subitem 2
- ▶ Item 2
- ▶ Item 3

Enumerations

1. The Fellowship of the Ring,
2. The Two Towers,
3. The Return of the King.

Descriptions

Trigon Modern.
Default Outdated.

Elements

Figures

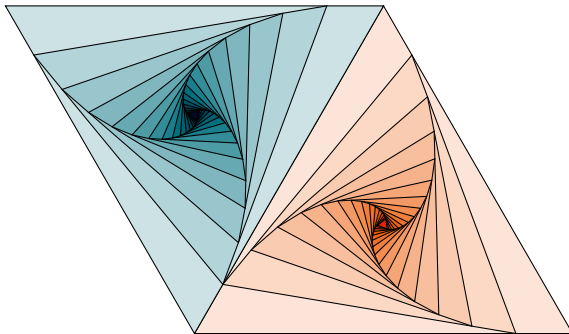


Figure 2: Rotated triangles from texample.net.

Elements

Tables



Table 1: A nice table example

	Velocity	Angle	Vertical force
	U	α	F_z
	[m/s]	[°]	[N]
2D simulation	9	2	9.23
3D simulation	10.0	3	15.039
Experiment A	11.31	2.5	13.2
Experiment B	11.26	2.7	12.6
Experiment C	11.33	2.47	13.6



Elements

Blocks

Regular block

Just a regular block

Alert block

Some important thing

Example block

No difference with regular block to avoid excessive distraction



Elements

Frame footer

TRIGON defines a custom beamer template to add a text to the footer. It can be set via

```
\setbeamertemplate{frame footer}{My custom footer}
```

References



Some references to showcase `[allowframebreaks]` `[?, ?, ?, ?, ?]`

The background of the slide is composed of two large, overlapping geometric shapes. A teal-colored shape, consisting of two overlapping triangles, is located in the upper-left corner. The rest of the slide is a light beige color.

Conclusion

Summary



Get the source of this theme and the demo presentation from

`gitlab.com/thlamb/beamertheme-trigon`

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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.

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

References I

