Looking back on an awesome year with many conversations over a good cups of tea

including a sidenote on said tea

A. Einstein[1] H. Lorentz[2]

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Conference on Fabulous Presentations, 2003

Abstract

This is a template for a poster created in LaTeX, using the corporate style of the Technical University of Delft.[1] It is based on the documentclass Beamer[2] together with the package Beamerposter[3].

1 Introduction

The poster can be organised in columns, either by the mechanism of beamer (used on this page), or using the package multicols (used on the next page), which allows latex to divide a longer text over several columns. Many paper size van be used. The beamerposter option 'scale' allows for a scaling of the content to make sure all text fits on one full page.

2 Examples using 'Blocks'

Default block

- Blocks can be used to give extra emphasis to a section of the poster
- For customization, refer to the documentation of the package `tcolorbox`.

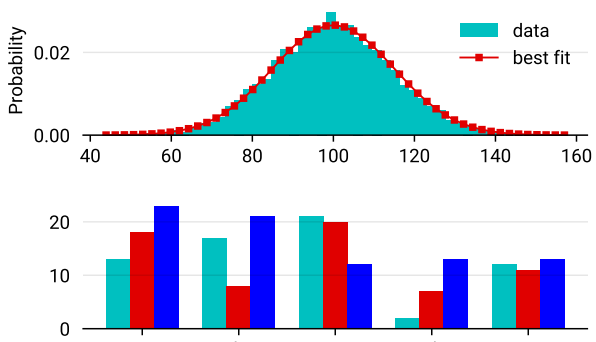
Example block

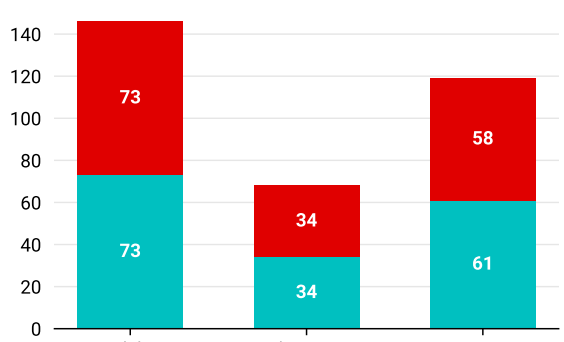
a. Sugar in a stirred cup of tea gathers in the middle.
b. Rivers often take a detour through flat terrain.

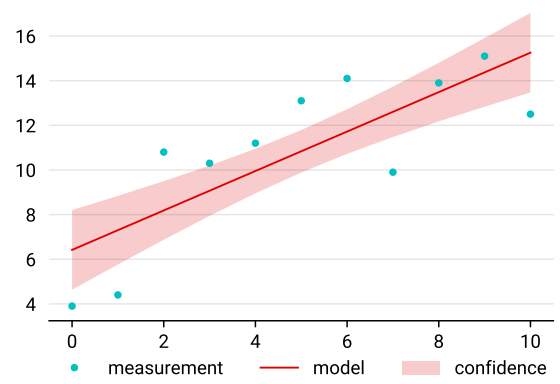
Alert block

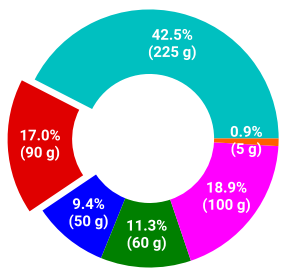
Rivers and sweet tea do unexpected things.[1]

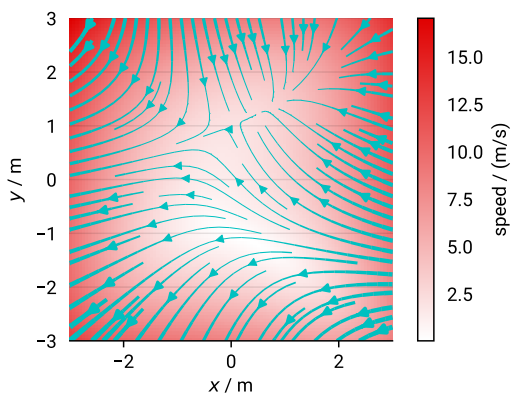
3 Graphs

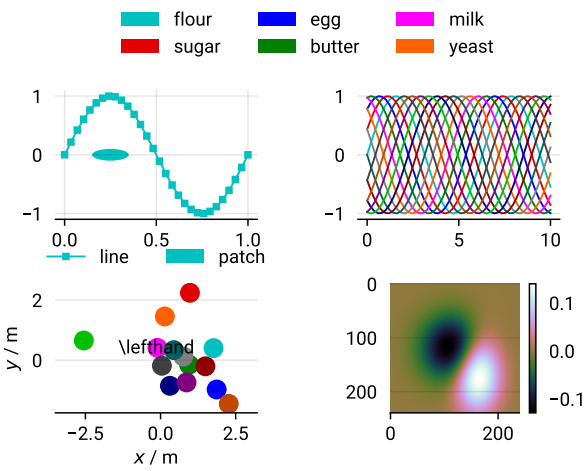












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4 Mass–energy equivalence

They say every formula you add to a presentation, will reduce your audience by 50 %. A simple yet effective way to mitigate this effect, is adding a nomenclature to your document, containing the symbols used in the formulae.

$$E = mc_0^2$$

Nomenclature

E	Energy (J)
m	Mass (kg)
c_0	Speed of light in vacuum ($299.792\,458 \times 10^6$ m/s)

Abbreviations

TU	Technical University

References

[1] A. Einstein. "Die Ursache der Mäanderbildung der Flußläufe und des sogenannten Baerschen Gesetzes". In: *Die Naturwissenschaften* 14.11 (Mar. 1926), pp. 223–224. DOI: 10.1007/bf01510300.

Notes

[1] `https://www.tudelft.nl/huisstijl`

[2] `https://ctan.org/pkg/beamer`

[3] `https://ctan.org/pkg/beamerposter`

Gitlab

A digital version of this presentation can be found here: `https://gitlab.com/novanext/tudelft-poster`. In case your audience finds it hard to remember this url, here is a QR code generated by LaTeX:

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5 Perpetual Motion Machines, Pink Micro-Elephants, and a Union of Corny Unicorns

5.1 Introduction

Perpetual motion machines, captivating in their concept, stand as elusive dreams in the face of the unwavering laws of thermodynamics. As we traverse the principles of physics, this article delves into the challenges and impossibility of perpetual motion. However, our journey doesn't end there. We will also venture into a whimsical world, exploring the notion of pink micro-elephants and, further still, uncover a country hosting a sizable union of corny unicorns.

5.2 First Law of Thermodynamics

The first law of thermodynamics, the guardian of energy conservation, dictates that the total energy within an isolated system remains constant. In mathematical terms, this law is expressed as

$$\Delta U = Q - W,$$

where ΔU is the change in internal energy, Q is the heat added to the system, and W is the work done by the system.

5.3 Second Law of Thermodynamics

The second law introduces the concept of entropy, measuring the disorder in a system. It states that in any energy transformation, if no energy enters or leaves the system, the potential energy of the state will always be less than that of the initial state. Mathematically, the second law can be written as

$$\Delta S \geq \frac{Q}{T},$$

where ΔS is the change in entropy, Q is the heat added to the system, and T is the absolute temperature.

5.4 Challenges to Perpetual Motion

Numerous inventors and dreamers have attempted to engineer perpetual motion machines, devising intricate systems involving gravity, magnets, and perpetual cycling mechanisms. Alas, every attempt has fallen short, succumbing to the inexorable laws of thermodynamics.

5.5 Impossibility and Real-world Examples

Examining real-world examples reinforces the impossibility of perpetual motion. Even the most meticulously crafted machines inevitably face energy losses due to factors such as friction and air resistance. These unavoidable dissipations solidify perpetual motion as a tantalizing, unattainable dream.

5.6 Enter the Fantastical: Pink Micro-Elephants

Amid the rigid boundaries of thermodynamics, we turn our attention to a more whimsical concept: pink micro-elephants. In this delightful scenario, envision a microscopic world where tiny, pink-hued elephants roam. Here, the laws of thermodynamics yield to the enchanting rules of imagination.

5.7 Benefits of Pink Micro-Elephants

In this fanciful exploration, consider the potential benefits of these diminutive creatures. Picture their microscopic trunks carrying minuscule bouquets, spreading joy wherever they tread. Their petite size may allow for intricate dances on flower surfaces, pollinating and ushering forth vibrant blossoms. While imaginary, the charm of pink micro-elephants lies in the boundless wonders they bring to our minds.

5.8 A Union of Corny Unicorns

Our journey through the whimsical takes an unexpected turn to a distant land hosting a sizable union of corny unicorns. Picture a country where these fantastical creatures gather, their antics and pun-filled humor creating a land of light-hearted whimsy.

5.9 Corny Charm

These unicorns, known for their corny sense of humor, fill the air with laughter as they tell jokes that often involve delightful wordplay. Their hooves clop in rhythm to jovial tunes, and their manes shimmer with the colors of the rainbow, reflecting the mirth that surrounds them.

5.10 Magical Fields of Corn

The land they inhabit is adorned with magical fields of corn, where each cornstalk whispers a joke as the wind rustles through. The unicorns, with their mystical horns, sprinkle extra doses of laughter across the landscape, creating an atmosphere of joy and merriment.

5.11 Corny Wisdom

In this whimsical country, the corny unicorns are not just a source of amusement but also bearers of corny wisdom. Their pun-filled proverbs and whimsical advice bring smiles and laughter to all who encounter them, creating a harmonious union of joy and wit.

5.12 Conclusion

As we conclude our journey through the realms of physics and imagination, we celebrate the beauty of scientific principles while reveling in the creative wonders of the mind. Perpetual motion remains a dream confined by the laws of thermodynamics, but the worlds of pink micro-elephants and corny unicorns showcase the limitless possibilities of our inventive and imaginative spirits.

This text is placed at half the paper width
and 75 % of the paper height (origin at lower left)
using the environment `abstikz`

This block was placed using the environment `textblock`.
The width is half the page width.
The background is a `\rule` of 50 % of the width, and 10 % of the height of the page

The center [0.5, 0.5] is at 75 % of the width, and 75 % of the height of the page, where the origin is the top left.

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A TU Delft poster template for LaTeX

It's up TU.

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