



# PRETTY POSTERS WITH L<sup>A</sup>T<sub>E</sub>X USING THE HYPOSTER STYLE

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## L<sup>A</sup>T<sub>E</sub>X POSTERS MADE EASIER

The HYposter style enables you to make scientific posters with a University of Helsinki look using the `beamerposter` package for L<sup>A</sup>T<sub>E</sub>X.

The official poster templates for the university are available only for Microsoft PowerPoint and Adobe InDesign, expensive pieces of software which are not easily available. L<sup>A</sup>T<sub>E</sub>X, on the other hand, is free and works on almost all commonly used computer systems. It also has superior capabilities in typesetting mathematical formulas, which makes it popular among scientists.

## THE LOOK

The university has two poster styles, that silly one with the gigantic logo and header taking up a third of the page, and the tighter one. This poster style tries to emulate the second one. Though it does not exactly conform to the official poster style of the university, but it tries to do a good enough job.

The background of the poster is white and the text is black. The block headings are in the faculty colour. The first line of the poster title is in the faculty colour and the rest in neutral grey. In the lower right corner the name of the university is set in neutral grey and the faculty name in the faculty colour. Some space for things such as logos of cooperating or supporting institutes is provided in the lower left.

The layout of the official poster and this example is three-column, but you can also use two columns.

It is not possible to use the university's official fonts, not least because of the rather strict license they come under. However, the sans-serif font used here is a reasonable replacement.

## USING THE PACKAGE

HYposter is a style definition for `beamerposter`, which itself is a package that uses the `beamer` document class to produce posters. This means you need both `beamer` and `beamerposter` in order it to work. Most modern L<sup>A</sup>T<sub>E</sub>X distributions already come with `beamer`, and installing the rest is not a problem.

Note that due to some radical redesigns, this style is not compatible with any other `beamerposter` style, that is, if you write a poster using this style, you cannot simply change the style to another one.

See the README and INSTALL files for more details about installation and usage of the package (though they assume a basic knowledge of L<sup>A</sup>T<sub>E</sub>X).

## VERSATILITY

This is the cool part: the poster supports *all* of the university's different colour themes. It also automatically changes the name of the faculty or department in the lower right corner. Everything happens under the hood, and the user does not need to worry about the appearance of the poster at all, only the contents.

The style supports all of the university's different faculties and special departments which have an official colour scheme.

## THE COLOUR OPTIONS

The colour scheme of the following faculties and departments is supported. This is a comprehensive list of all the official color schemes defined for our university.

- Faculty of Agriculture and Forestry
- Faculty of Arts
- Faculty of Behavioural Sciences
- Faculty of Biological and Environmental Sciences
- Faculty of Law
- Faculty of Medicine
- Faculty of Pharmacy
- Faculty of Science
- Faculty of Social Sciences
- Faculty of Theology
- Faculty of Veterinary Medicine
- Swedish School of Social Science
- Aleksanteri Institute
- Center for Information Technology
- Center for Properties and Facilities
- Helsinki Collegium for Advanced Studies
- Institute of Biotechnology
- Laboratory Animal Centre
- Language Centre
- Neuroscience Center
- Open University
- Palmenia Centre for Continuing Education
- Ruralia Institute
- University of Helsinki Library
- None (plain black and white)

## CAN I HELP?

There are still various issues with the style. There are some problems with math fonts which I haven't been able to solve to my satisfaction.

Contributions and comments are always welcome. Contribute on Github or send email to [olli.wilkman@iki.fi](mailto:olli.wilkman@iki.fi).

## EXAMPLE 1: MATH

You can more or less use all the nice math features of L<sup>A</sup>T<sub>E</sub>X in your poster:

$$\int_{-\infty}^{\infty} \frac{1}{\sqrt{2\pi\sigma^2}} \exp\left(-\frac{(x-\mu)^2}{2\sigma^2}\right) dx = 1 \quad (1)$$

$$P(x) = \begin{cases} \frac{1}{6}x(x-1), & 0 \leq x \leq 1 \\ 0, & \text{otherwise} \end{cases} \quad (2)$$

$$\sum_{n=0}^{\infty} \frac{1}{2^n} = 2 \quad (3)$$

## EXAMPLE 2: IMAGES AND REFERENCES

Including images is simple. With pdfL<sup>A</sup>T<sub>E</sub>X, you can use images in many common formats, including PNG and JPEG, though in a poster you should strive to use scaleable graphics, for example in PDF format. Due to a limitation of pdfL<sup>A</sup>T<sub>E</sub>X, EPS graphics do not work, but they can be converted to PDF.

Using labels to refer to figures and tables also works like it should, as demonstrated by these references to Figure 1 and Table 1.

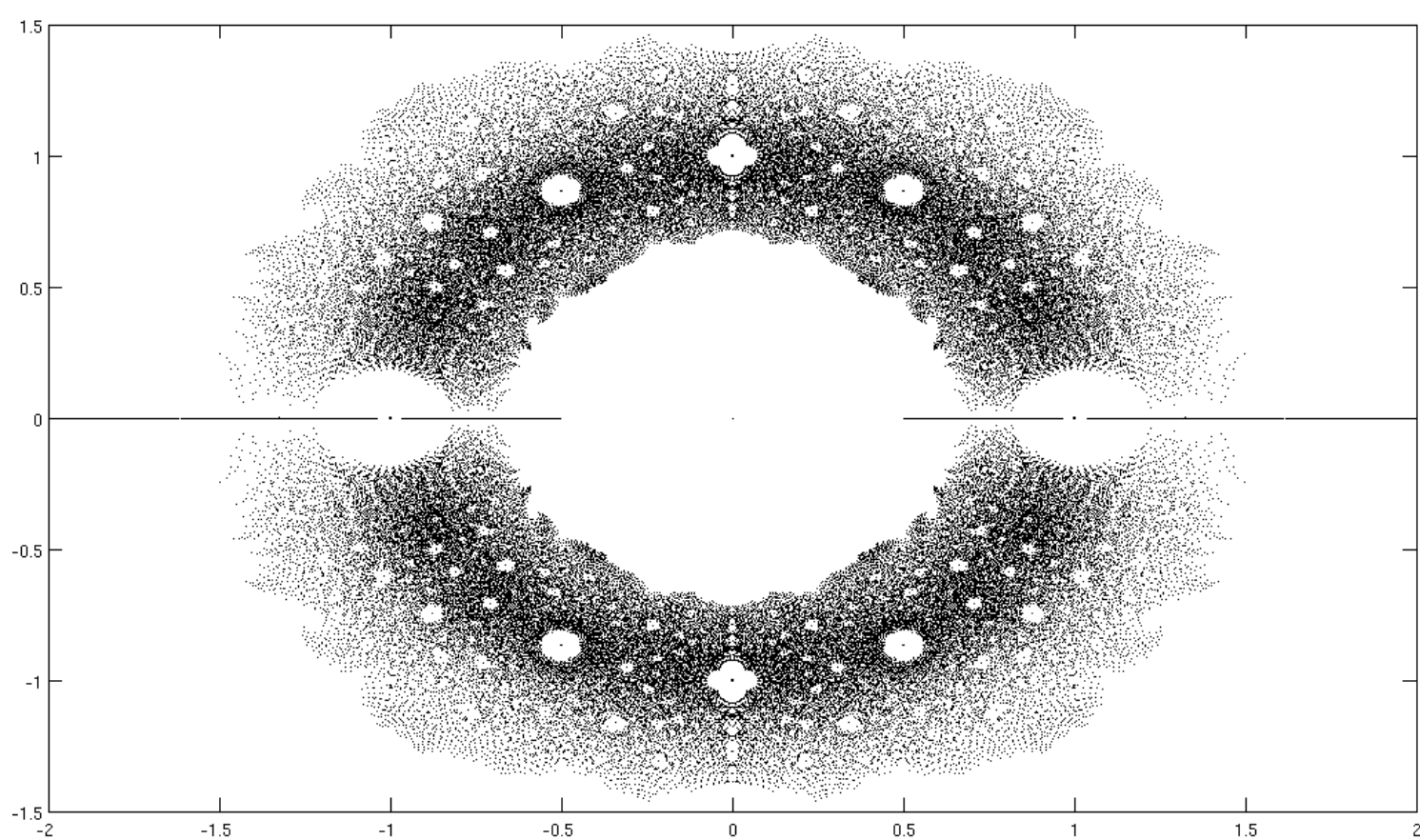


Figure 1: Some mathematical plot

Image courtesy of Janne Korhonen.

## EXAMPLE 3: TABULATED TABLE

Table environments work, too.

$x$	$x^2$	$x^3$	$x^4$
1	1	1	1
2	4	8	16
3	9	27	81
4	16	64	256
5	25	125	625

Table 1: Some natural numbers and their first few powers.

## WHERE CAN I FIND IT?

HYposter is hosted at Github for ease of development and cooperation. Get it at <https://github.com/dronir/HYposter>.