Facets of Mathematics Poster Template

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Poster creation with LaTeX

This template can be used to create a poster using LaTeX. It makes use of the `tikzposter` LaTeX package to typeset the different poster elements.

Including mathematics

The full features of LaTeX are available within the poster. For example we can include inline formulæ, $e^{i\pi} + 1 = 0$, and can include numbered equations

$$\psi_{n+1} = \psi_n + hF\left(\psi_n, t_n\right), \qquad (1)$$

and then refer to them via a label, as in equation (1). We can also include unnumbered and multi-line equations.

Including code

It is possible to include code, but the code should appear in a separate file and be included with `lstinputlisting`. For example:

```
def factorial(n):
    f = 1
    for j in range(2, n + 1):
        f *= j
    return f
```

Creating columns

Columns are created using the `column` command inside the `columns` environment (i.e. between `\begin{columns}` and `\end{columns}`). Above this block (check the source code!) `\column{0.75}` creates a column which spans three quarters of the poster. Poster contents is added to the columns by adding one or more blocks.

Subcolumns are created using the `\subcolumn` command within the `subcolumns` environment (i.e. between `\begin{subcolumns}` and `\end{subcolumns}`). Below, `\subcolumn{0.33}` creates a subcolumn which spans 33% of the *column* within which the subcolumns are defined.

Defining blocks

Within each column or subcolumn a block, containing text and other elements, can be defined using the `block` command. This can be used via `\block{[title]}{[contents]}`.

The final block in a column or subcolumn can be expanded to fill to the bottom of the poster by using `\vfillblock` in place of `\block`.

Customizing blocks

It is possible to change the colours used in a block – for example to highlight a particularly important piece of information or a particularly important result. This example sets all four colours, and also makes use of some custom colours set near the top of the file using `definecolor`.

Including figures

You can add figures to the poster, but this is a bit different from the documents we have used so far. To include a figure in the poster you should use the `tikzfigure` environment, with the caption in square brackets, and the label before the figure itself (see the source code for Fig. 1).

In this example we also use the `minipage` environment to place this text to the left of the image.

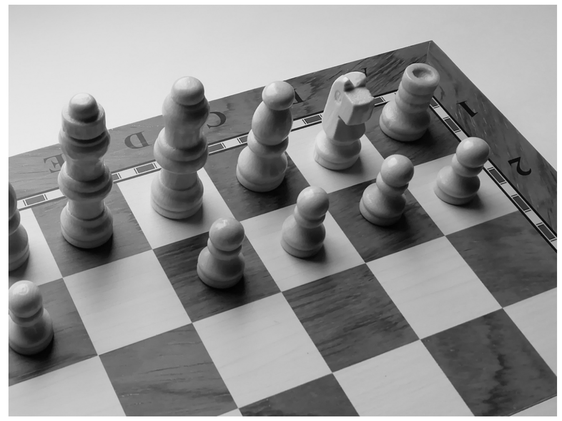

Fig. 1: An 8-bit greyscale image of part of a chess set.

References

[1] A. Einstein, *Ist die Trägheit eines Körpers von seinem Energieinhalt abhänging?*, Annalen der Physik 323(13), 639–641, 1905

[2] G. K. Vallis, *Atmospheric and Oceanic Fluid Dynamics: Fundamentals and Large-scale Circulation*, Cambridge University Press, 2006

[3] Overleaf Documentation, https://www.overleaf.com/learn/latex/Main_Page, accessed 13 August 2020