\LaTeX{}: it’s not you, it’s me
IT'S A MATCH!
Why did we fall in love?
Le premier liure de Moyf,
DID Géneve.

ARGUMENT.

O, premier livre que j'aiguisé pour l'escriva de mes Hìnhes, que je veux faire par et qui est l'ordre.

Rasonement.

1. Puis Doun Duf, que le meneur, qui est sur le coeur, souffle de mes Êtres, en vous bon, et que je le souvenirs. Et fut aist fait.

2. Et Duns apoude dere, que la main de la main, qui ece la main.

3. Puis Duns de, que la main prodic velun, ce qui est le meneur de mes Êtres, sus nos yiels, tant et tant, tant et tant.

4. Et Duns apoude dere, que la main de la main, qui ece la main.

5. En Duns de, que la main prodic velun, ce qui est le meneur de mes Êtres, sus nos yiels, tant et tant, tant et tant.

6. Et Duns de, que la main prodic velun, ce qui est le meneur de mes Êtres, sus nos yiels, tant et tant, tant et tant.

CAPITOLE I.

[Diagramme de la page]
Benefits of \LaTeX

Focus on structure instead formatting makes reformatting easy

Wide acceptance among publishers

\LaTeX-packages available on CTAN

6,380

Gives you street cred

Runs on IBM 4300 mainframe

245,905

Questions about (\La)\TeX on tex.stackexchange.com
Donald Knuth invented \TeX{} in 1978 to typeset the second volume of his book on „The Art of Computer Programming”

**TECHNOLOGIES DEVELOPED FOR \TeX{}**

- Macro-based typesetting system
- Computer Modern: Font family
- DVI: Document output format
- Line-breaking algorithm
- METAFONT: Font Technology
- WEB: Programming language
\text{T\LaTeX\text{X}} is very low-level and operates with formatting-driven primitives.

„For a document to be easy to read, its visual structure must reflect its logical structure.“
— Leslie Lamport, Inventor of \LaTeX, 1985

\LaTeX\text{X} is a macro collection for \text{T\LaTeX} that puts structure first.
Can I put a long URL in the bibliography?

Overfull hbox (badness 10000)

Can I change the color of some text?

\usepackage{xcolor}
\definecolor{orange}{HTML}{FF7F00}
\textcolor{orange}{your text}

Okay, let’s put an \( \alpha \) here.

Missing $ inserted. Proceed, with fingers crossed.
It’s not you, it’s me.
Patoline
Last Release: May 28, 2022
Why did we break up in the first place?
Let’s use *markup* instead of \texttt{commands} for common tasks.
On flying vegetables

The discovery of air-borne vegetables, or _vegetabilia volans_, has been a remarkable breakthrough in the field of botany. @cambridge21

Discovered species include, but are not limited to:
- flying carrots
- flying tomatoes
- pummeling pumpkins

The species become airborne through an increased production of helium gas within the plant tissues, described by the "emission function" $\mathcal{H}(x, \delta)$. 

<table>
<thead>
<tr>
<th>Discovered species</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>flying carrots</td>
<td></td>
</tr>
<tr>
<td>flying tomatoes</td>
<td></td>
</tr>
<tr>
<td>pummeling pumpkins</td>
<td></td>
</tr>
</tbody>
</table>
Overwrite with `\renewcommand`

→ Most users do not know enough \LaTeX to override macros

Load a package with `\usepackage`

→ Packages all have their own conventions and configuration

Write your own `\documentclass`

→ Document classes often contain >1,000 lines of hard-to-read macros
How do I change the font to Helvetica?

Let’s also make this text red.

And I need an APA-style bibliography.
I want to have a box around my code blocks
How do I do it?

```
#show raw: it => rect(
  width: 100%,
  inset: 2em,
  radius: 0.5em,
  fill: rgb("#EFF0F3"),
  it,
)
```
radius: 0.5em,
fill: rgb("#EFF0F3"),

}
Includes an interpreted scripting language
// Create an array and join it
// with the string "and".
We count
#range(1, 5).map(str).join(" and ")!
$\texttt{pdflatex paper.tex}$

LaTeX Warning: Label(s) may have changed. Rerun to get cross-references right.

Recompile project

Check for convergence
= **Introduction**

// ...
This seems complicated. How long do compiles take?

They are instant

Look at me doing it on every keystroke

This message took 11ms to arrive.
Building an incrementally executed scripting language

More about performance in Typst.
Some things from the Roadmap

- HTML export
- Accessible PDFs
- More flexible layout
Use Typst in your browser

https://typst.app/signup?code=ubuntu23

Collaborative writing and local compilation with WebAssembly

$ cargo install \
> --git https://github.com/typst/typst

Local installation
Requires Rust 1.73
Use Typst in your browser
https://typst.app/signup?code=ubuntu23

Local installation
$ cargo install \
  --git https://github.com/typst/typst

Image credits:

- It’s a match based on CodePen https://codepen.io/lluisalen/pen/gOYVddp
- Bible in LaTeX, Raphaël Pinson, https://github.com/raphink/geneve_1564
- Knuth and Appelbaum, Jacob Appelbaum, https://commons.wikimedia.org/wiki/File:Jacob_Appelbaum_and_Donald_Knuth.jpg
- IBM mainframe, [Tycho], https://commons.wikimedia.org/wiki/File:IBM_4361.jpg
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Thank you for joining!