

```
1 \input{beamer_setup.tex}
2 \title[Simbe]{Introducing Simbe for Technical Slides}
3 \subtitle{Simbe}
4 \author[JP Onnela]{JP Onnela}
5 \date[July 10, 2021]{July 10, 2021}
6 \institute[]{}{Department of Biostatistics \ \ Harvard University}
7 \frame{\titlepage}
8
9 **Introducing Simbe
10 -Simbe is an ultralight markup language for math / code heavy slides
11 -I wrote it in 2013 when I had to prepare 600+ slides for teaching a new course
12 -PowerPoint and Keynote were not feasible options for technical slides
13 -LaTeX Beamer has too much markup overhead for simple functionalities
14 -Simbe is a very simple LaTeX preprocessor written in Python 3
15 -It converts a Simbe file to a standard latex file which is compiled to PDF slides
16 -Simbe is short for Simple LaTeX Beamer
17
18 **Functionality of Simbe
19 -Simbe makes the following LaTeX / Beamer operations easy
20     -Bullets
21     -Equations
22     -Figures
23     -Code with syntax highlighting
24 -These cover 99\% of my needs, but it's really just LaTeX, so you can do anything
25 -This is a famous equation:
26 --
27 E=mc^2
28 --
29
30 **Figures
31 -Computers are now used everywhere in science
32 ---
33 my-figure.pdf, 0.7
34 -This is a serious computer.
35 ---
36
37 **Code with Syntax Highlighting
38 -Python is increasingly used in research settings
39 -Check out my HarvardX course ``Using Python for Research''
40 -Here's a simple Python program with syntax highlighting:
41 ----
42 from math import pi
43 print(pi)
44 ----
45
46 **Code with Syntax Highlighting
47 -Some programs are more complicated
48 -In some cases it's better to place a program in its own file
49 -It's especially helpful if you want to execute code on your slides
50 -Here's Python code for generating the Fibonacci sequence
51 -----my_code.py-----
```

Introducing Simbe for Technical Slides

Simbe

JP Onnela

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July 10, 2021

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Functionality of Simbe

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  - Equations
  - Figures
  - Code with syntax highlighting
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$$E = mc^2 \tag{1}$$

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Introducing Simbe

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Figures

- Computers are now used everywhere in science

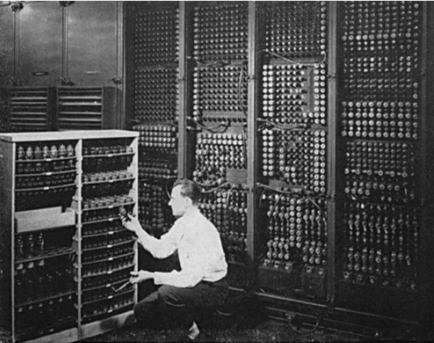


Figure: This is a serious computer.

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Code with Syntax Highlighting

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- In some cases it's better to place a program in its own file
- It's especially helpful if you want to execute code on your slides
- Here's Python code for generating the Fibonacci sequence

```
1 def fibonacci(n):
2     a = b = 1
3     for i in range(n):
4         yield a
5         a, b = b, a + b
6
7 for k in fibonacci(10):
8     print(k)
```

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