

# A Very Important Mathematical Problem

or, A Big Uncertain Data Quantification

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April 6th, 2017



It is a trivial matter to demonstrate that

$$e^{i\pi} + 1 = 0. \tag{1}$$

Here is a “sketch” of the proof:

1. First, assume that  $e^{i\theta} = \cos(\theta) + i \sin(\theta)$ .
  - (any third grader knows this)
2. Then, substitute  $\theta = \pi$ , and use your knowledge of trigonometric functions.
  - a. (this was done in second grade)
  - b. (I'm really just testing how itemize and enumerate interact)

Between lists of things, some more text is added.

- Test this out too
  1. testing yet another interaction
- No idea what will happen
  - some further unordered points go here

Here is a very long frame title which will extend on to a second line.

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Notice that the title does not run through the logo. This took me a lot of suffering to sort out (along with the logo positioning/behavior itself). The documentation isn't that great out there.

Another small annoyance is that “vspace”s are needed to have spaces between pieces of text.

With all this in mind, we state a theorem.

Theorem (A trivial statement)

*Suppose that  $e^{i\theta} = \cos(\theta) + i \sin(\theta)$ , where  $i = \sqrt{-1}$  and  $\theta \in \mathbb{R}$ .*

*Then  $e^{i\pi} + 1 = 0$ .*



If you don't include a frame title, there won't be a horizontal rule included, but the logo will still show. If you don't want the logo in a frame like this either, you need to mimick the behavior done with the title page macro defined in the source file.

# Here's the UNC logo

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- I've included the Old Well logo here, because we all love our university very much.
- Keep in mind that you **need** to have the file `oldwell_cmyk.eps` in the same directory as your `.tex` file for the presentation to compile successfully. In principle, you could use a different image.
- The Old Well logo is from UNC's "Downloadable Resources:"  
<http://identity.unc.edu/downloadable-resources/>



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