

The Proof of Nothing

Some subtitle

Daniele Parmeggiani

Università degli Studi di Trento, DISI

2018-07-21

Table of contents

1 Introduction

1.1 Some subsection

There Is No Largest Prime Number

The proof uses *reductio ad absurdum*.

Theorem

There is no largest prime number.

1. Suppose p were the largest prime number.
2. Consider the number $p + 1$.
3. $p + 1$ is not prime, because it is divisible by p .
4. But $q + 1$ is greater than 1, thus divisible by some prime number not in the first p numbers.

There Is No Largest Prime Number

The proof uses *reductio ad absurdum*.

Theorem

There is no largest prime number.

1. Suppose p were the largest prime number.
2. Let q be the product of the first p numbers.
3. $q + 1$ is greater than 1, thus divisible by some prime number not in the first p numbers.

There Is No Largest Prime Number

The proof uses *reductio ad absurdum*.

Theorem

There is no largest prime number.

1. Suppose p were the largest prime number.
2. Let q be the product of the first p numbers.
3. Then $q + 1$ is not divisible by any of them.
4. But $q + 1$ is greater than 1, thus divisible by some prime number not in the first p numbers.

A longer title

* one

* two¹

¹the number 2

- * Here you can see an itemization
 - * It has items
 - * The items are below each other

Plain frame with title

Introduction → Some subsection

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris. Nam arcu libero, nonummy eget, consectetur id, vulputate a, magna. Donec vehicula augue eu neque. Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas. Mauris ut leo. Cras viverra metus rhoncus sem. Nulla et lectus vestibulum urna fringilla ultrices. Phasellus eu tellus sit amet tortor gravida placerat. Integer sapien est, iaculis in, pretium quis, viverra ac, nunc. Praesent eget sem vel leo ultrices bibendum. Aenean faucibus. Morbi dolor nulla, malesuada eu, pulvinar at, mollis ac, nulla. Curabitur auctor semper nulla. Donec varius orci eget risus. Duis nibh mi, congue eu, accumsan eleifend, sagittis quis, diam. Duis eget orci sit amet orci dignissim rutrum.

Some code here

Introduction → Some subsection

```
import this
```

Example

some example