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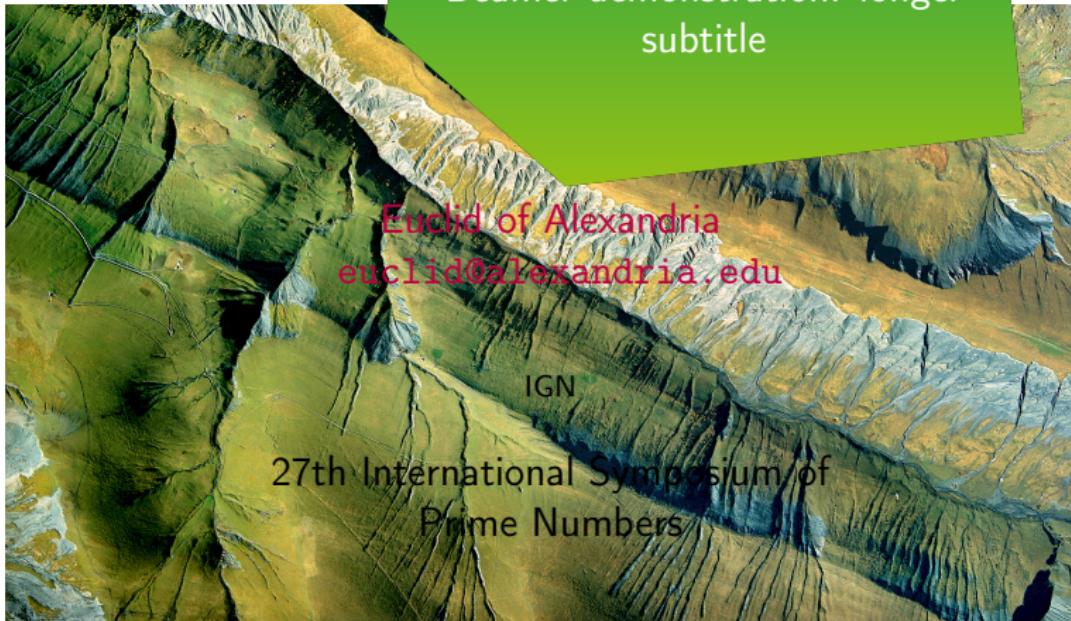
# There Is No Largest Prime Number

Beamer demonstration: longer  
subtitle

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IGN

27th International Symposium of  
Prime Numbers





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# Introduction

# Introduction

Volupti



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# Introduction

subsection name

# 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  $q = p + 1$ . Then  $q$  is either prime or composite.
3. If  $q$  is prime, then  $q$  is larger than  $p$ , which contradicts the assumption that  $p$  is the largest prime number.
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. Then  $q + 1$  is greater than 1.
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. 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.



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# Introduction

subsection 2

Text qui volupti



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Thank you for your  
attention!

A background image showing a detailed aerial or satellite view of a mountainous terrain. The landscape is characterized by green fields and brown, rocky mountain slopes. In the center-left of the image, there is a semi-transparent white rectangular box containing text.

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