## LSCM xyz: big title

## Lecture 1 subtitle

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## There Is No Largest Prime Number Theorem and Proof

## Theorem 1 (Example)

There is no largest prime number.

## Proof.

The invertible elements in a field form a group under multiplication. In particular, the elements

$$
1,2, \ldots, p-1 \in \mathbb{Z}_{p}
$$

form a group under multiplication modulo $p$. This is a group of order $p-1$. For $a \in \mathbb{Z}_{p}$ and $a \neq 0$ we thus get $a^{p-1}=1 \in \mathbb{Z}_{p}$. The claim follows.

## 1. Section name

### 1.1 Subection name

## The environments Lemma, Proposition, Corrollary and Definition

## Lemma 1 (Title of lemma)

There is no largest prime number.

## Proposition 1 (Title of proposition)

There is no largest prime number.

## Corollary 1 (Title of corrollary)

There is no largest prime number.

## Definition 1 (Title of definition)

There is no largest prime number.

## Enumerate environment

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.

## Itemize environment

■ one

- two


## Figure, example and alert block



Figure 1: Caption of figure

## Example 2

$■$ Lists change colour after the environment.

## Important message

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## Example block

## Title of block

If a lot of text should be highlighted, it is a good idea to put it in a box.

## Example table

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