

# Tornarem a Patir el L<sup>A</sup>T<sub>E</sub>X

## Sessió 6: Transparències, Recursos Addicionals

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12 Juny 2009

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## 1 Transparències

- Portada
- Secciónat
- Contingut
- Animacions

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# Transparències

- Diversos paquets existents:

- slides
- prosper
- beamer
- ...

# Transparències

- Diversos paquets existents:

- slides
- prosper
- **beamer**
- ...

# Paquet beamer

- Classe:

```
\documentclass{beamer}
```

- Transparències:

```
\begin{frame}  
  \frametitle{...}  
  ...  
\end{frame}
```

# Portada a beamer

- Declaració:

```
\title[ títol curt]{ títol llarg }
\subtitle[ subtítol curt]{ subtítol llarg }
\author[ autor \and autor ( curt )]
{ autor \and autor ( llarg )}
\institute[ inst. curt]{ inst. llarg }
\date{data}
```

- Generació:

```
\maketitle
```

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# Seccionat a beamer

- Seccions:

```
\section{...}  
\subsection{...}
```

- Taula de continguts:

```
\tableofcontents
```

# Secciónat a beamer

- Inici de secció:

```
\AtBeginSection {  
    \begin{frame}  
        \frametitle{Lorem Ipsum Index}  
        \tableofcontents[  
            sectionstyle=show/shaded,  
            subsectionstyle=show/show/hide]  
    \end{frame}  
}
```

- Inici de subsecció:

```
\AtBeginSubsection {  
    \begin{frame}  
        \frametitle{Lorem Ipsum Index}  
        \tableofcontents[  
            sectionstyle=show/hide,  
            subsectionstyle=show/shaded/hide]  
    \end{frame}  
}
```

## 1 Transparències

- Portada
  - Secciónat
  - Contingut
  - Animacions

2 Recursos

### 3 Pràctica

# Lorem Ipsum Index

## 1 Transparències

- Portada
- Seccional
- Contingut
- Animacions

# Textos a beamer

```
\begin{frame}
  \frametitle{Lorem Ipsum}

  Lorem ipsum dolor sit amet, consectetur adipiscing elit. Donec porta
  ultrices ligula, et lacinia lectus laoreet in. Aenean tristique odio
  ut justo volutpat non porta neque hendrerit. Aliquam metus neque,
  semper vel placerat a, laoreet interdum justo. Pellentesque habitant
  morbi tristique senectus et netus et malesuada fames ac turpis
  egestas. Phasellus et vehicula ante. Cras risus dui, venenatis et
  dapibus sed, vestibulum eu diam. Fusce ac dolor metus, non mollis
  felis\textcolor{red}{dots}
\end{frame}
```

# Lorem Ipsum

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Donec porta ultrices ligula, et lacinia lectus laoreet in. Aenean tristique odio ut justo volutpat non porta neque hendrerit. Aliquam metus neque, semper vel placerat a, laoreet interdum justo. Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas. Phasellus et vehicula ante. Cras risus dui, venenatis et dapibus sed, vestibulum eu diam. Fusce ac dolor metus, non mollis felis...

# Enumeracions a beamer

```
\begin{frame}
  \frametitle{Lorem Ipsum}

  \begin{enumerate}
    \item Lorem ipsum dolor sit amet
      \begin{itemize}
        \item Consectetur adipiscing elit
        \end{itemize}
    \item Donec porta ultrices ligula
      \begin{itemize}
        \item Et lacinia lectus laoreet in
        \end{itemize}
    \end{enumerate}
  \end{frame}
```

# Lorem Ipsum

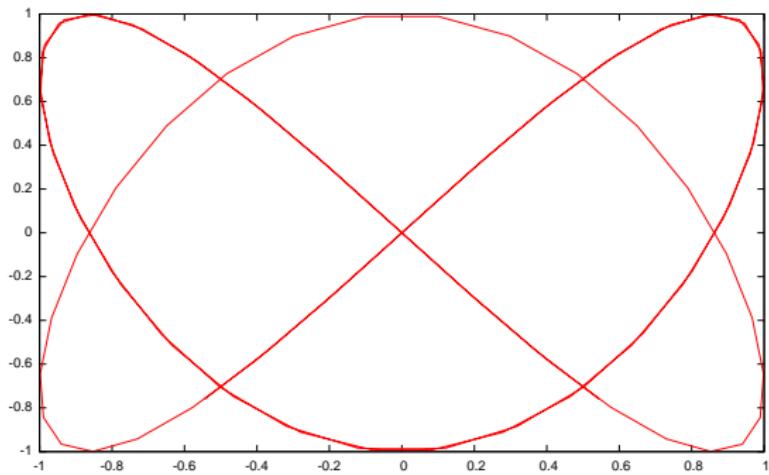
- ① Lorem ipsum dolor sit amet
  - Consectetur adipiscing elit
- ② Donec porta ultrices ligula
  - Et lacinia lectus laoreet in

# Imatges a beamer

```
\begin{frame}
  \frametitle{Lorem Ipsum}

  \begin{center}
  \includegraphics[width=.7\linewidth]{plot}
  \end{center}
\end{frame}
```

## Lorem Ipsum



# Pauses a beamer

```
\begin{frame}
  \frametitle{Lorem Ipsum}

  \begin{enumerate}
    \item Lorem ipsum dolor sit amet \pause
      \begin{itemize}
        \item Consectetur adipiscing elit \pause
        \end{itemize}
    \item Donec porta ultrices ligula \pause
      \begin{itemize}
        \item Et lacinia lectus laoreet in
        \end{itemize}
    \end{enumerate}
  \end{frame}
```

# Lorem Ipsum

- ① Lorem ipsum dolor sit amet

# Lorem Ipsum

- ① Lorem ipsum dolor sit amet
  - Consectetur adipiscing elit

# Lorem Ipsum

- ① Lorem ipsum dolor sit amet
  - Consectetur adipiscing elit
- ② Donec porta ultrices ligula

# Lorem Ipsum

- ① Lorem ipsum dolor sit amet
  - Consectetur adipiscing elit
- ② Donec porta ultrices ligula
  - Et lacinia lectus laoreet in

# Overlays a beamer

- Intervals:

- <x> Transparència x
- <x,y> Transparències x i y
- <x-y> Transparències de la x a la y
- <-x> Transparències fins la x
- <x-> Transparències a partir de la x

# Overlays a beamer

- Us d'interval·s:

```
\onslide <...>{...}
```

```
\only <...>{...}
```

```
\item <...>{...}
```

```
\alert <...>{...}
```

# Overlays a beamer

```
\begin{frame}
  \frametitle{Lorem Ipsum}

  \begin{center}
    \begin{tabular}{|c|c|c|c|}
      \hline
      : \onslide <1-2>{1--2} : & : \onslide <2->{2--} : &
      : \onslide <1,4>{1,4} : & : \onslide <-3>{---3} : \\
      \hline
      : \only <1-2>{1--2} : & : \only <2->{2--} : &
      : \only <1,4>{1,4} : & : \only <-3>{---3} : \\
      \hline
      : \alert <1-2>{1--2} : & : \alert <2->{2--} : &
      : \alert <1,4>{1,4} : & : \alert <-3>{---3} : \\
      \hline
    \end{tabular}
  \end{center}
\end{frame}
```

## Lorem Ipsum

1	2
3	4

: 1-2 :	: : :	: 1,4 :	: -3 :
: 1-2 :	: : :	: 1,4 :	: -3 :
: 1-2 :	: 2- :	: 1,4 :	: -3 :

## Lorem Ipsum

1	2
3	4

: 1-2 :	: 2- :	: : :	: -3 :
: 1-2 :	: 2- :	: : :	: -3 :
: 1-2 :	: 2- :	: 1,4 :	: -3 :

## Lorem Ipsum

1	2
3	4

: : :	: 2- :	: : :	: -3 :
: : :	: 2- :	: : :	: -3 :
: 1-2 :	: 2- :	: 1,4 :	: -3 :

## Lorem Ipsum

1	2
3	4

: : :	: 2- :	: 1,4 :	: : :
: : :	: 2- :	: 1,4 :	: : :
: 1-2 :	: 2- :	: 1,4 :	: -3 :

# Overlays a beamer

```
\begin{frame}
  \frametitle{Lorem Ipsum}

  \begin{center}
    \only<1>\tiny tiny%
    \only<2>\scriptsize scriptsize%
    \only<3>\footnotesize footnotesize%
    \only<4>\small small%
    \only<5>\normalsize normalsize%
    \only<6>\large large%
    \only<7>\Large Large%
    \only<8>\LARGE LARGE%
    \only<9>\huge huge%
    \only<10>\Huge Huge%
  \end{center}
\end{frame}
```

# Lorem Ipsum

tiny

**scriptsize**

# Lorem Ipsum

footnotesize

# Lorem Ipsum

small

# Lorem Ipsum

normalsize

# Lorem Ipsum

large

# Lorem Ipsum

Large

## LARGE

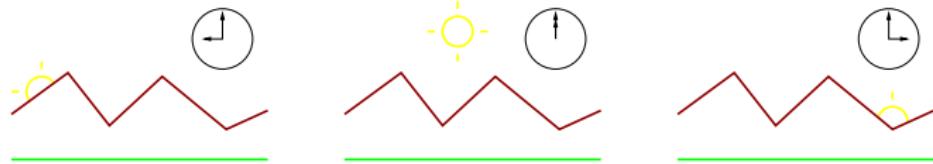
# Lorem Ipsum

huge

Lorem Ipsum

Huge

# Overlays a beamer

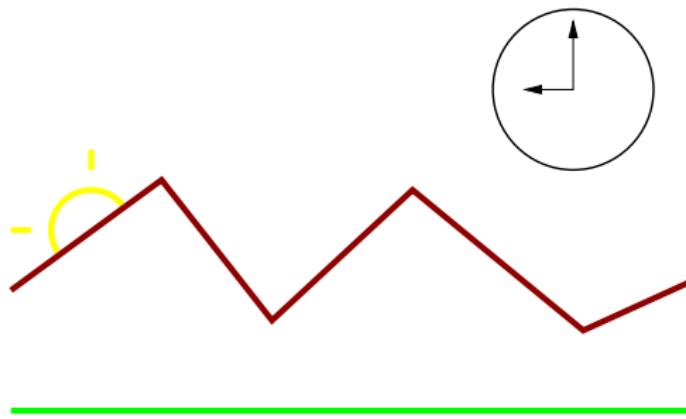


# Overlays a beamer

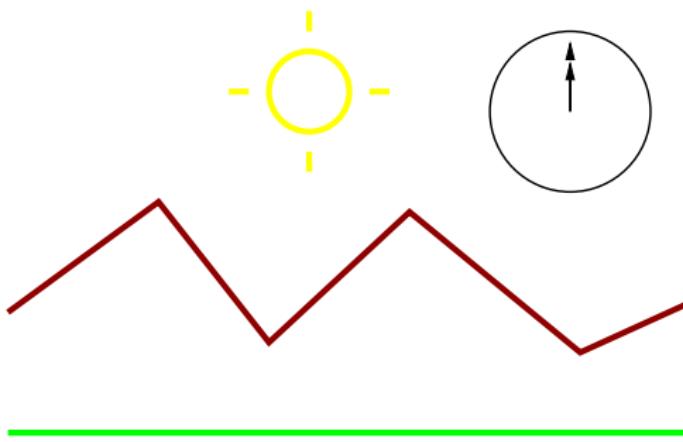
```
\begin{frame}
  \frametitle{Lorem Ipsum}

  \begin{center}
    \only<1>\includegraphics[height=.6\textheight]{fig/time1}%
    \only<2>\includegraphics[height=.6\textheight]{fig/time2}%
    \only<3>\includegraphics[height=.6\textheight]{fig/time3}%
  \end{center}
\end{frame}
```

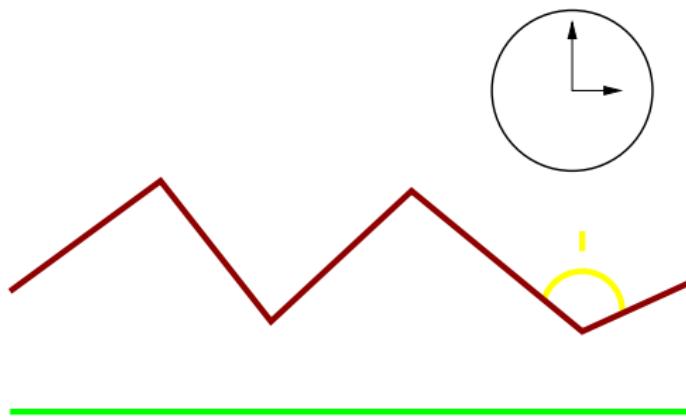
## Lorem Ipsum



## Lorem Ipsum



## Lorem Ipsum



# Temes a beamer

- Temes de Presentació:

```
\usetheme{...}
```

- Temes individuals:

```
\useoutertheme{...}  
\useinnertheme{...}  
\usecolortheme{...}
```

# Temes de Presentació

- Sense navegació:

```
\usetheme{default}
```

There Is No Largest Prime Number  
With an introduction to a new proof technique

Euklid of Alexandria

Department of Mathematics  
University of Alexandria

27th International Symposium on Prime Numbers, -280

Results  
Proof of the Main Theorem

There Is No Largest Prime Number  
The proof uses *reductio ad absurdum*.

Theorem  
*There is no largest prime number.*

Proof.

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. Thus  $q+1$  is also prime and greater than  $p$ .

□

# Temes de Presentació

- Sense navegació:

```
\usetheme{Madrid}
```

There Is No Largest Prime Number  
With an introduction to a new proof technique

Euklid of Alexandria

Department of Mathematics  
University of Alexandria

27th International Symposium on Prime Numbers, –280

Results

- Proof of the Main Theorem

There Is No Largest Prime Number  
The proof uses *reductio ad absurdum*.

Theorem

*There is no largest prime number.*

Proof.

- Suppose  $p$  were the largest prime number.
- Let  $q$  be the product of the first  $p$  numbers.
- Then  $q+1$  is not divisible by any of them.
- Thus  $q+1$  is also prime and greater than  $p$ .  $\square$

# Temes de Presentació

- Amb arbre de navegació:

```
\usetheme{Antibes}
```

The slide has a dark blue header bar with the title 'There Is No Largest Prime Number'. Below the header, there's a large blue box containing the main text: 'There Is No Largest Prime Number' and 'With an introduction to a new proof technique'. At the bottom of the slide, there's a footer section with the text 'Euklid of Alexandria' and 'Department of Mathematics, University of Alexandria', followed by the date '27th International Symposium on Prime Numbers, -280'. At the very bottom, there are navigation icons for a Beamer presentation.

This slide is similar to the one above, featuring a dark blue header bar with the title 'There Is No Largest Prime Number' and a sub-header 'Lectures' and 'L'atex of the Month'. Below the header, it says 'There Is No Largest Prime Number' and 'The proof uses *reductio ad absurdum*'. It includes a 'Theorem' section stating 'There is no largest prime number.' and a 'Proof' section. The proof is presented as a list of steps: 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. Thus  $q+1$  is also prime and greater than  $p$ . The slide ends with a small square icon. At the bottom, there are navigation icons for a Beamer presentation.

# Temes de Presentació

- Amb barra lateral:

```
\usetheme{PaloAlto}
```

The slide has a blue header bar with the title 'There Is No Largest Prime Number' and the subtitle 'With an introduction to a new proof technique'. Below the header, there is a dark blue footer bar with the text 'Euklid of Alexandria' and 'Department of Mathematics, University of Alexandria'. At the bottom, it says '27th International Symposium on Prime Numbers, -280'. A sidebar on the left contains a 'Results' section with a bullet point 'Proof of the Main Theorem'.

This slide is identical to the one above, featuring the same title, subtitle, and footer information. It also includes a 'Results' sidebar. The right side of the slide contains a 'Theorem' section with the statement 'There is no largest prime number.', a 'Proof' section with a numbered list of steps, and a small square icon at the end of the list.

# Temes de Presentació

- Amb mini-frame:

```
\usetheme{Berlin}
```

Results  
Proof of the Main Theorem

**There Is No Largest Prime Number**

With an introduction to a new proof technique

Euklid of Alexandria

Department of Mathematics  
University of Alexandria

27th International Symposium on Prime Numbers, -280

1 Results  
■ Proof of the Main Theorem

Results  
Proof of the Main Theorem

**There Is No Largest Prime Number**

The proof uses *reductio ad absurdum*.

Theorem

*There is no largest prime number.*

Proof.

- 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 Thus  $q+1$  is also prime and greater than  $p$ .

# Temes de Presentació

- Amb taules de secció:

```
\usetheme{Copenhagen}
```

The slide has a blue header bar with the word 'Results'. The main title is 'There Is No Largest Prime Number' in a large blue box, followed by a subtitle 'With an introduction to a new proof technique'. Below the title is the author's name 'Euklid of Alexandria' and affiliation 'Department of Mathematics, University of Alexandria'. The date '27th International Symposium on Prime Numbers, -280' is also present. At the bottom left is a navigation menu with 'Results' and 'Proof of the Main Theorem'. The footer shows the Beamer navigation icons.

This slide is identical in layout to the one above, featuring the same title, subtitle, author information, and date. It also includes the 'Results' and 'Proof of the Main Theorem' menu items at the bottom left. The footer shows the Beamer navigation icons.

# Temes externs

- default   Sense navegació
- tree   Amb arbre de navegació
- sidebar   Amb barra lateral
- miniframes   Amb mini-frame
- split   Amb taules de secció

# Temes interns

default   Estàndard  
circles   Cercles  
rounded   Cercles ombrejats  
rectangles   Rectangles  
inmargin   Al marge

# Temes de color

```
\usecolortheme{default}
```

This is a screenshot of a LaTeX Beamer presentation. The title of the slide is "There Is No Largest Prime Number". Below the title, it says "With an introduction to a new proof technique". The author is listed as "Euclid of Alexandria" from the "Department of Mathematics, University of Alexandria". The slide is dated "27th International Symposium on Prime Numbers, -280". At the bottom left, there is a "Results" section with a link to "Proof of the Main Theorem". The Beamer navigation icons are visible at the bottom.

This is a screenshot of a LaTeX Beamer presentation. The title of the slide is "There Is No Largest Prime Number". It states that the proof uses *reductio ad absurdum*. The theorem is defined as "There is no largest prime number". The proof section begins with "Proof." and lists four steps: 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. Thus  $q+1$  is also prime and greater than  $p$ . A small square icon with a diagonal line is at the end of the list. The Beamer navigation icons are visible at the bottom.

# Temes de color

```
\usecolortheme{albatross}
```

The title bar shows 'Title is in the LaTeX Document Class'. The slide content includes:

- Title:** There Is No Largest Prime Number
- Author:** Euclid of Alexandria
- Institution:** Department of Mathematics, University of Alexandria
- Date:** 27th International Symposium on Prime Numbers, -280
- Section:** Results
- Sub-section:** Proof of the Main Theorem

Navigation icons at the bottom right include back, forward, search, and other presentation controls.

The title bar shows 'Title is in the LaTeX Document Class'. The slide content includes:

- Title:** There Is No Largest Prime Number
- Text:** The proof uses *reductio ad absurdum*.
- Section:** Theorem
- Text:** *There is no largest prime number.*
- Section:** Proof.
- List:**
  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. Thus  $q + 1$  is also prime and greater than  $p$ .  $\square$

Navigation icons at the bottom right include back, forward, search, and other presentation controls.

# Temes de color

```
\usecolortheme{beetle}
```

The slide has a dark blue header bar with the title 'There Is No Largest Prime Number' and author 'Euclid'. The main content area is light gray. It contains the text 'There Is No Largest Prime Number' and 'With an introduction to a new proof technique'. Below this, it says 'Euklid of Alexandria' and 'Department of Mathematics, University of Alexandria'. At the bottom, it mentions '27th International Symposium on Prime Numbers, -280' and 'Results: Proof of the Main Theorem'. The footer shows standard Beamer navigation icons.

This slide is identical in layout and content to the one above, featuring a dark blue header bar with the title 'There Is No Largest Prime Number' and author 'Euclid'. The main content area is light gray, containing the same text and information. The footer shows standard Beamer navigation icons.

# Temes de color

```
\usecolortheme{wolverine}
```

There Is No Largest Prime Number  
With an introduction to a new proof technique

Euklid of Alexandria  
Department of Mathematics  
University of Alexandria

27th International Symposium on Prime Numbers, -280

**Results**  
Proof of the Main Theorem

There Is No Largest Prime Number  
The proof uses *reductio ad absurdum*.

**Theorem**  
*There is no largest prime number.*

**Proof.**

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. Thus  $q+1$  is also prime and greater than  $p$ . □

# Temes de color

```
\usecolortheme{crane}
```

The slide has a yellow header bar with the title 'There Is No Largest Prime Number' and the author's name 'Euclid of Alexandria'. Below the title is a subtitle 'With an introduction to a new proof technique'. The main text area contains the theorem statement 'There Is No Largest Prime Number' and the author's name 'Euclid of Alexandria'. At the bottom, there is a section titled 'Results' with the sub-section 'Proof of the Main Theorem'. The footer of the slide shows standard Beamer navigation icons.

This slide is identical to the one above in terms of content and layout. It features a yellow header bar with the title 'There Is No Largest Prime Number' and the author's name 'Euclid of Alexandria'. Below the title is a subtitle 'With an introduction to a new proof technique'. The main text area contains the theorem statement 'There Is No Largest Prime Number' and the author's name 'Euclid of Alexandria'. At the bottom, there is a section titled 'Results' with the sub-section 'Proof of the Main Theorem'. The footer of the slide shows standard Beamer navigation icons.

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2 Recursos

3 Pràctica

# Recursos

- Llibres

- $\text{\LaTeX}$ : A Document Preparation System
- The  $\text{\LaTeX}$ Companion

# Recursos

## • Tutorials On-line

- The Not So Short Introduction to  $\text{\LaTeX}$ :  
<http://tobi.oetiker.ch/lshort/lshort.pdf>
- Indian  $\text{\TeX}$  Users Group:  
<http://www.tug.org/tutorials/tugindia/>
- Getting to Grips with  $\text{\LaTeX}$ :  
<http://www.andy-roberts.net/misc/latex/>
- $\text{\LaTeX}$  para las Humanidades:  
<http://rt0016xp.eresmas.net/lph/latex-humanidades.pdf>

# Recursos

- Referències:

- Hypertext Help with  $\text{\LaTeX}$ :  
<http://www.giss.nasa.gov/tools/latex/>
- $\text{\LaTeX}$  for Linguists: <http://www.essex.ac.uk/linguistics/clmt/latex4ling/>

# Recursos

- Repositoris:

- T<sub>E</sub>X Catalogue: <ftp://tug.org/tex-archive/help/Catalogue/brief.html>
- Comprehensive T<sub>E</sub>X Archive Network:  
<http://www.tug.org/ctan.html>

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# Pràctica

## 1 Generar el document:

- <http://www.lsi.upc.edu/~egonzalez/latex/practica6.pdf>
- <http://www.lsi.upc.edu/~egonzalez/latex/beamer.pdf>
- <http://www.lsi.upc.edu/~egonzalez/latex/time1.pdf>
- <http://www.lsi.upc.edu/~egonzalez/latex/time2.pdf>
- <http://www.lsi.upc.edu/~egonzalez/latex/time3.pdf>

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# Bona sort!!



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