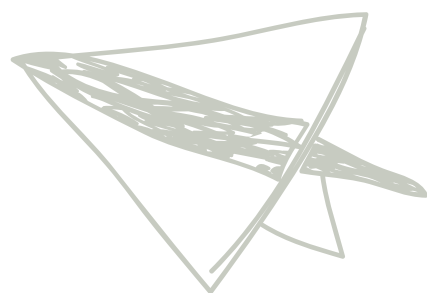




SAPIENZA  
UNIVERSITÀ DI ROMA

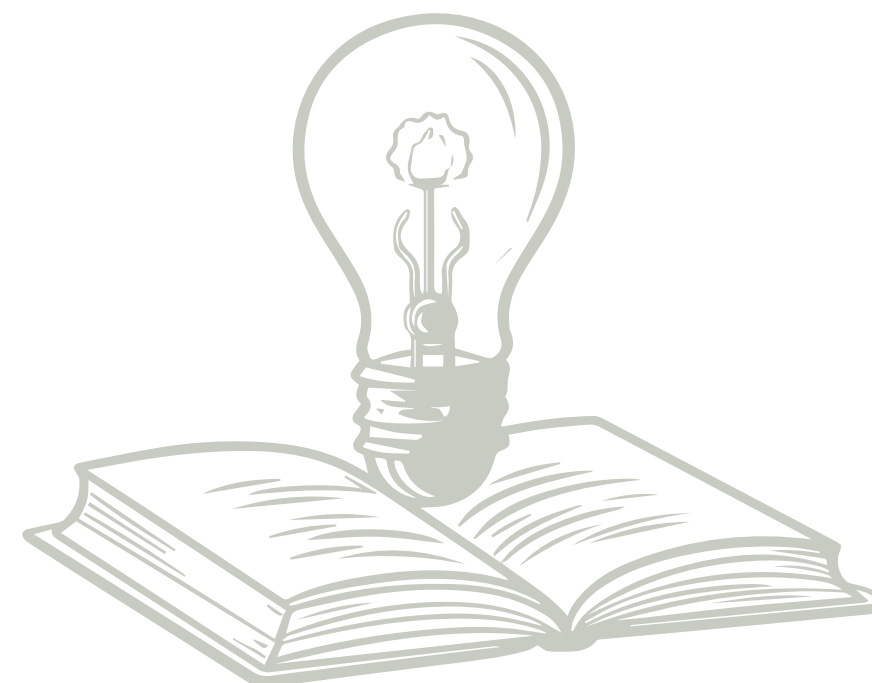
Iniziative culturali e sociali  
degli studenti



# LATEX LAB

L'arte della scrittura accademica

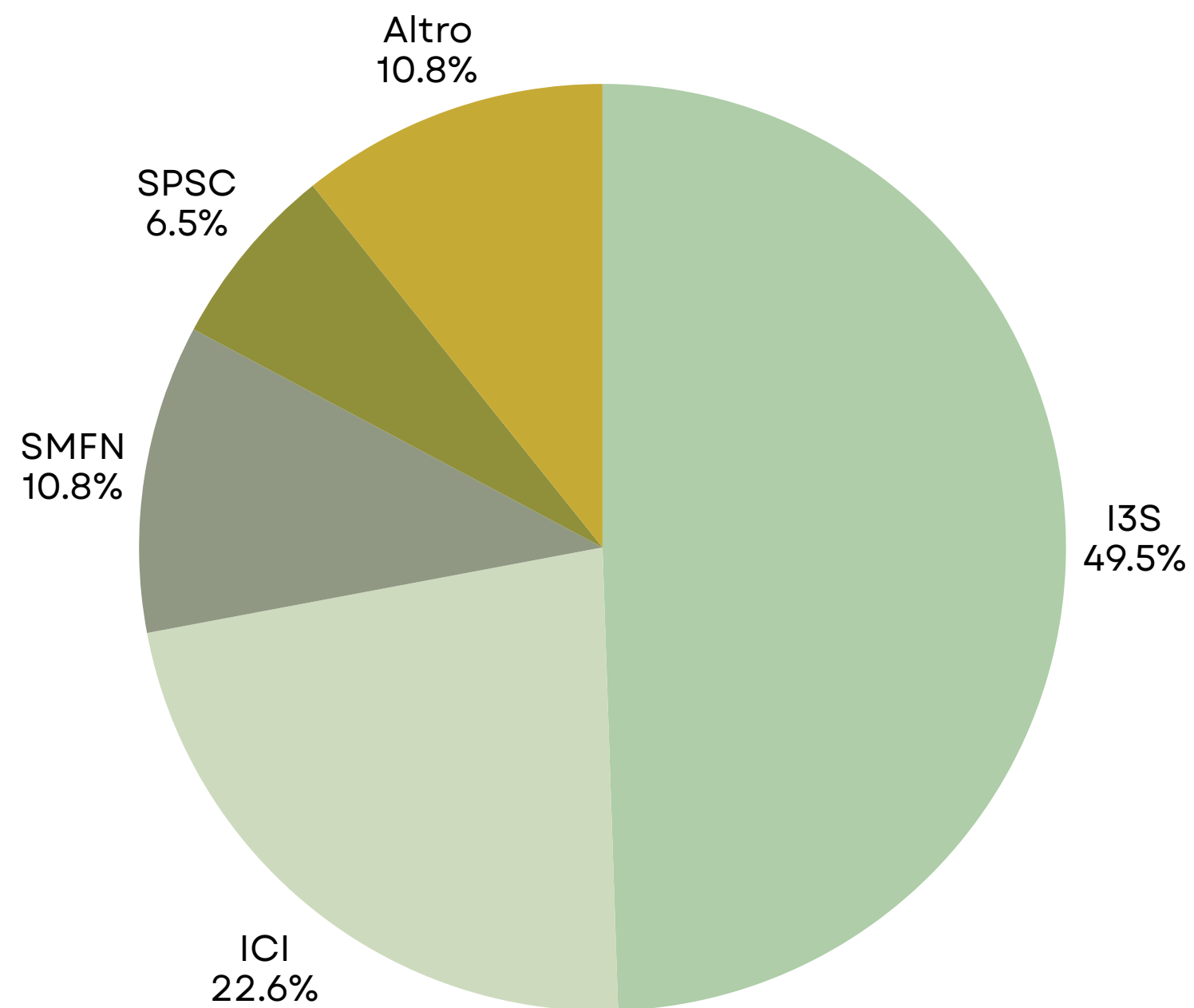
L<sup>A</sup>T<sub>E</sub>X



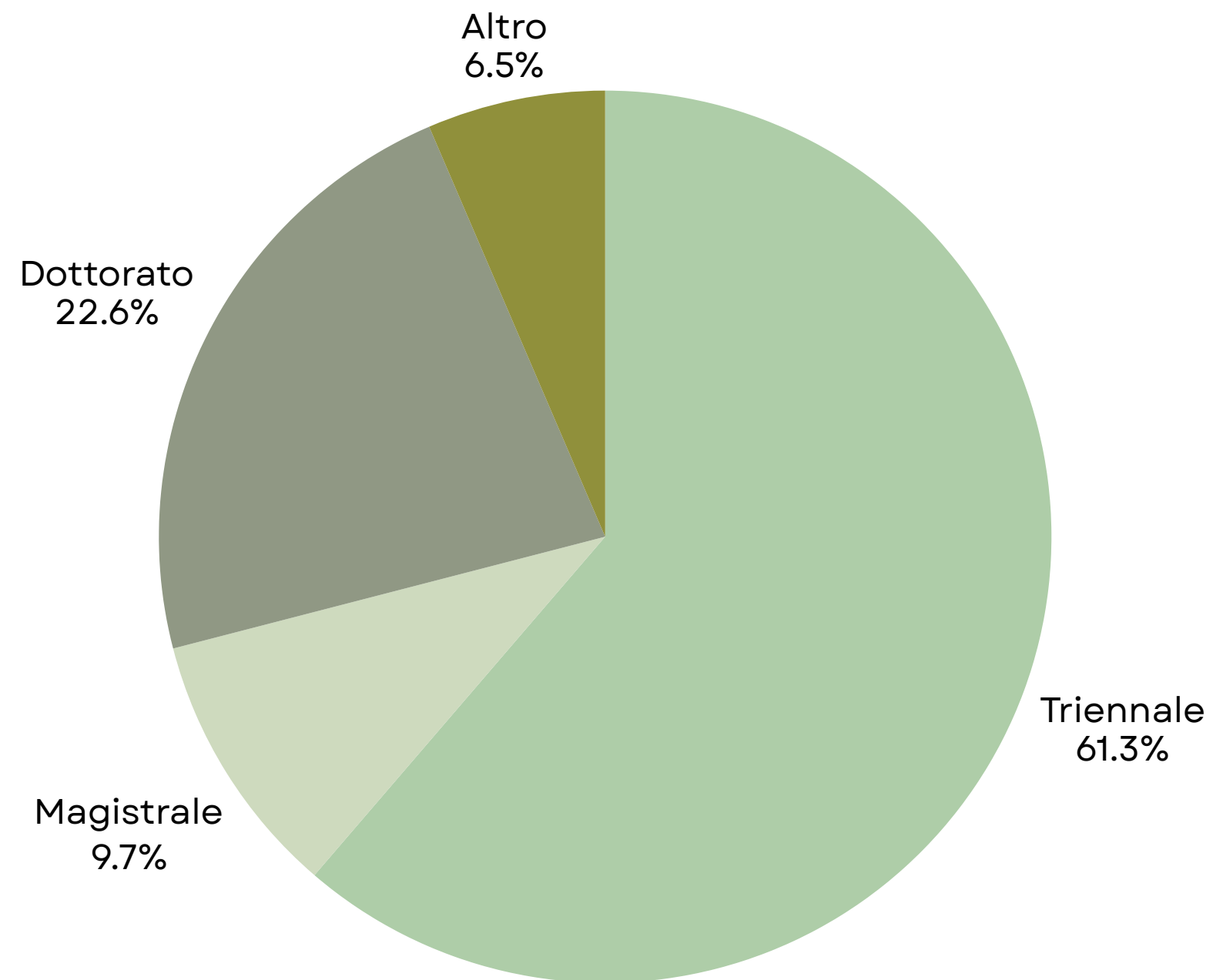
# Qualche statistica...



Facoltà di appartenenza



Tipologia di corso

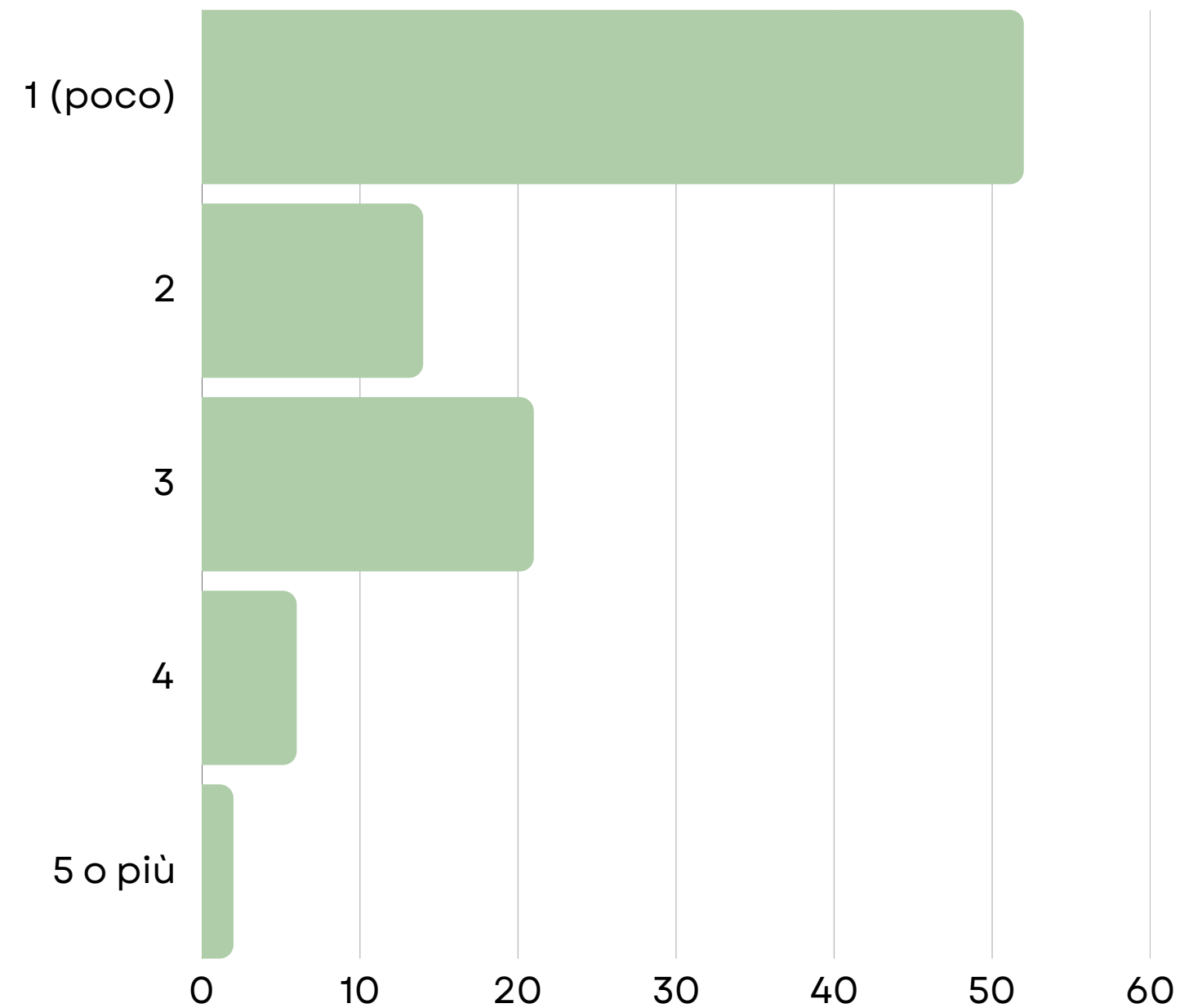


# Qualche altra statistica...



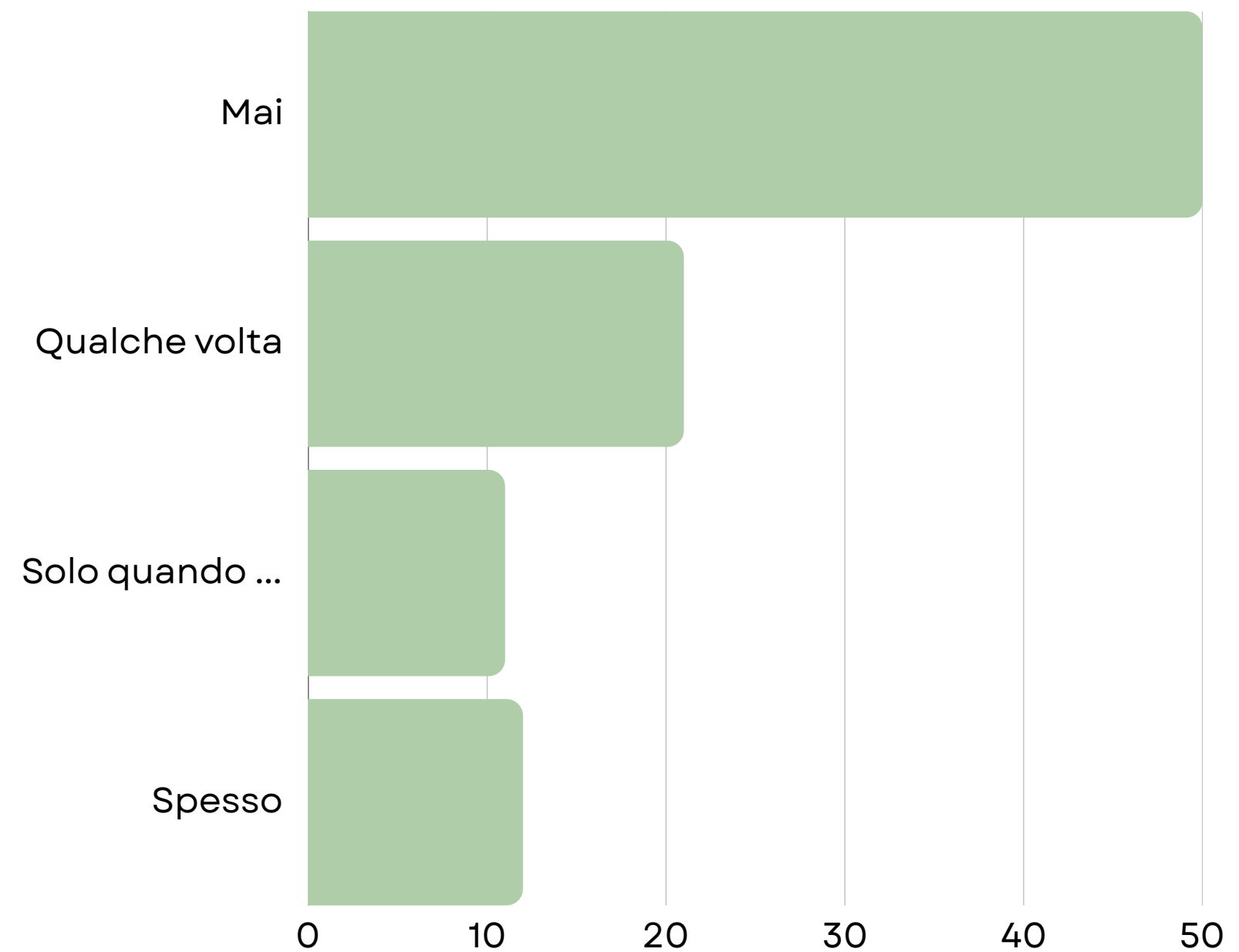
LaTeX

Quanto ritenete di conoscerlo



LaTeX

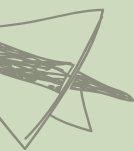
Quanto spesso lo utilizzate



# Obiettivi

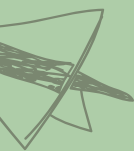


In questa lezione continueremo il percorso iniziato nella lezione precedente, approfondendo altre funzionalità avanzate e osservando **esempi reali** di utilizzi di LaTeX in ambito **accademico** e **professionale**.



**MATERIALI DEL CORSO**

L<sup>A</sup>T<sub>E</sub>X



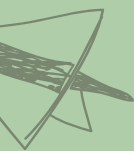
# LATEXLAB

## SOLUZIONI

Mini Progetto lezione 1



L<sup>A</sup>T<sub>E</sub>X



# LATEXLAB

## SESSIONE TEORICA

Lezione 2



L<sup>A</sup>T<sub>E</sub>X

# Code listing



```
\documentclass{article}
\begin{document}
\begin{verbatim}
Hello, world!
\end{verbatim}
\end{document}
```

Verbatim è lo strumento “base” di LaTeX per stampare testo così com’è (spazi, a capo, caratteri speciali).

Testo all’interno di **\begin{verbatim}** ...  
**\end{verbatim}** viene mostrato in font a larghezza fissa e i comandi LaTeX non vengono interpretati.

# Code listing



```
\documentclass{article}
\usepackage{listings}
\begin{document}
\begin{lstlisting}
Hello, world!
\end{lstlisting}
\end{document}
```

Il pacchetto **listings** consente di inserire codice con più controllo estetico.

Permette di definire il linguaggio del codice, attivare evidenziazione sintattica (keywords, commenti, stringhe...), numeri di riga, altro.

Si inserisce il codice usando l'ambiente **lstlisting**.

# Code listing



```
\documentclass{article}
\usepackage{listings}
\begin{document}
\begin{lstlisting}[language=Python]
print(Hello, world!)
\end{lstlisting}
\end{document}
```

È possibile specificare il linguaggio del codice nel `lstlisting`, per attivare la evidenziazione.

Con il linguaggio specificato, keywords, commenti e altri elementi vengono colorati/sottolineati.

# Code listing



```
\documentclass{article}
\usepackage{listings}
\begin{document}
\lstinputlisting[language=Python,
firstline=2, lastline=12]
{pippo.py}
\end{document}
```

Se il codice è già salvato in file .py, .m, .cpp... si può importare direttamente nel documento.

È anche possibile importare solo una parte del file specificando firstline e lastline, così da mostrare solo il segmento rilevante.

# Code listing



```
\documentclass{article}
\usepackage{listings}
\usepackage{xcolor}
\definecolor{codegreen}{rgb}{0,0.6,0}
\lstdefinestyle{mystyle}{
  commentstyle=\color{codegreen},
  ...
}
\lstset{style=mystyle, language=Python}
\begin{document}
\lstinputlisting{pluto.py}
\end{document}
```

Con listings si può definire uno stile personalizzato per i blocchi di codice.

Possibilità di configurare: colori di commenti, stringhe, keyword; sfondo del box codice; tipo e grandezza del font; numeri di riga; interruzioni di linea; tabulazioni, etc.

# Code listing



```
\documentclass{article}
\usepackage{listings}
\begin{document}
\lstinputlisting[language=Python,
caption=Python example]
{paperino.py}
\end{document}
```

Come con figure o tabelle, si possono associare didascalie (caption) e etichette (label) ai blocchi di codice e fare riferimenti nel testo con `\ref{...}`.

È anche possibile generare una lista di tutti i listing (**`\listoflistings`**), simile a un indice di figure o tabelle.

# Hyperlinks



```
\documentclass{article}  
\usepackage{hyperref}  
\begin{document}  
...  
\end{document}
```

Importando il pacchetto hyperref tutti gli elementi con riferimento diventano cliccabili (ad esempio i capitoli e le sezioni all'interno dell'indice, i riferimenti a immagini e tabelle ecc...).

# Hyperlinks



```
\documentclass{article}
\usepackage{hyperref}
\hypersetup{
  colorlinks=true,
  linkcolor=blue,
  filecolor=magenta,
  urlcolor=cyan
}
\urlstyle{same}
\begin{document}
...
\end{document}
```

E' possibile anche scegliere lo stile dei link inserendo il setup nel preambolo del documento.

# Hyperlinks



```
\documentclass{article}
\usepackage{hyperref}
\begin{document}
\href{https://www.overleaf.com}{Questo è un link}
```

```
Anche questo: \url{https://www.overleaf.com}
\end{document}
```

Per inserire riferimenti esterni si può sia creare del testo che porta ad un URL (`href`), sia inserire l'URL per esteso (`url`).

# Matrici



```
\documentclass{article}
\usepackage{amsmath}
\begin{document}
 $\begin{bmatrix} 1 & 2 & 3 \\ a & b & c \end{bmatrix}$ 
\end{document}
```

Il pacchetto amsmath permette, anche, di inserire matrici in diversi formati (con diversi delimitatori, ad esempio “()”, “[ ]”, “{ }” ecc...).

Per tutti i diversi formati si rimanda alla documentazione allegata in bibliografia.

# Align



```
\documentclass{article}
\usepackage{amsmath}
\begin{document}
\begin{align*}
2x - 5y &= 8 \\
3x + 9y &= -12
\end{align*}
\end{document}
```

Se vogliamo allineare più equazioni verticalmente possiamo usare l'ambiente align. (*N.B.: nell'esempio \* elimina la numerazione delle equazioni come visto per sezioni e sottosezioni*)

Di solito >, < e = sono gli elementi allineati.

# Align



```
\documentclass{article}
\usepackage{amsmath}
\begin{document}
\begin{align*}
x&=y \text{ \& } w \text{ \& } z \text{ \& } a&=b+c\\
2x&=-y \text{ \& } 3w&=\frac{1}{2}z \text{ \& } a&=b\\
-4 + 5x&=2+y \text{ \& } w+2&=-1+w \text{ \& } ab&=cb
\end{align*}
\end{document}
```

Per allineare non solo verticalmente, ma anche orizzontalmente, più equazioni la notazione è simile a quella usata per le tabelle.

Notare che “&” rileva automaticamente se si trova prima di un uguale ecc...

# Cases



```
\documentclass{article}
\usepackage{amsmath}
\begin{document}
\[
1+(-1)^n=\mathbf{\begin{cases}
0, & \text{se } n \text{ dispari} \\
2, & \text{altrimenti}
\end{cases}}
\end{cases}
\]
\end{document}
```

Quando una funzione ha più regole (casi), si scrivono con l'ambiente cases.

# Parentesi



```
\documentclass{article}
\usepackage{amsmath}
\begin{document}
\[ \left[ \frac{N}{\left( \frac{L}{p} \right) - (m+n)} \right] \right] \]
\end{document}
```

Per ridimensionare i delimitatori (parentesi) dinamicamente si utilizzano `\left` e `\right`, in questo modo LaTeX adatta automaticamente la dimensione delle parentesi in funzione del contenuto interno.

Anche se abbiamo solo un delimitatore, dobbiamo comunque usare sia `\left` che `\right` per “**bilanciare**”, lasciando una delle due vuota (inserendo un “.”, es. `\right.`).

# Importare tabelle (csv)



```
\documentclass{article}  
\usepackage{csvsimple}  
\begin{document}  
\csvautotabular{test.csv}  
\end{document}
```

E' possibile creare tabelle da file csv con il pacchetto csvsimple.

# Importare tabelle (csv)



```
\documentclass{article}
\usepackage{csvsimple}
\begin{document}
\begin{tabular}{||c|}\hline
\textbf{Nominativo} & \textbf{Matr.} \\
\csvreader[head to column names]
{voti.csv}{}{
\\ \cognome \ nome & \matricola }
\\ \hline
\end{tabular}
\end{document}
```

## voti.csv

```
nome,cognome,matricola,voto
Mario,Rossi,12345,1.0
Luigi,Bianchi,23456,2.3
Maria,Alberti,34567,5.0
Luigi,Orsina,19202,3.3
```

E' possibile anche  
combinare diverse colonne  
del csv all'interno di singole  
colonne della tabella.

# Dividere in più file



main.tex

```
\documentclass{article}  
\begin{document}  
\input{file.tex}  
...  
\end{document}
```

file.tex

```
\include{file2}  
...
```

file2.tex

```
...
```

Quando si lavora su progetti molto grandi potrebbe essere utile dividere il codice LaTeX in diversi file .tex

Per farlo, si possono usare include o input.

Include crea un'interruzione di pagina e permette di utilizzare \includeonly per compilazioni parziali rapide;

Input non crea un'interruzione di pagina e permette di annidare input dentro input.

L<sup>A</sup>T<sub>E</sub>X

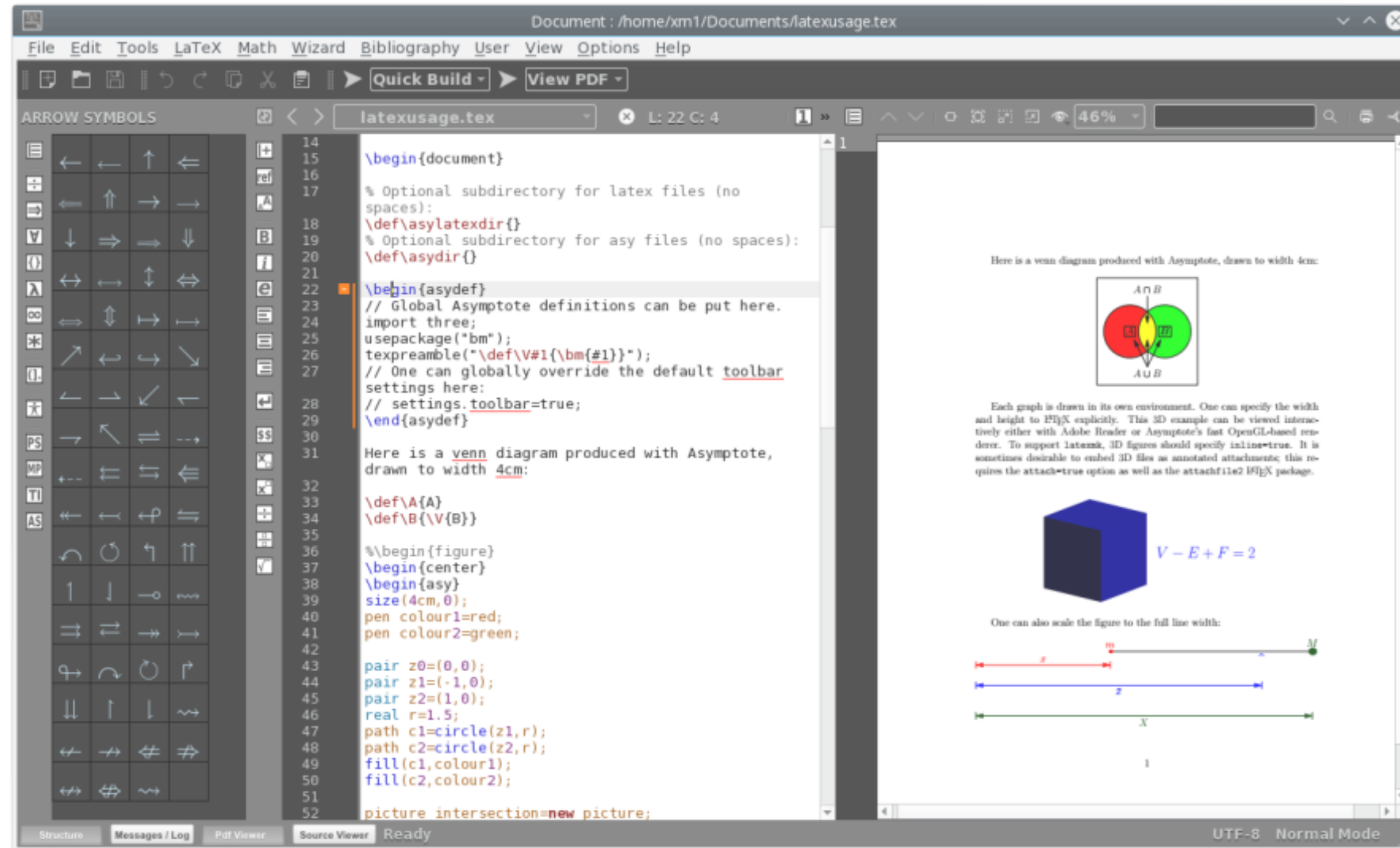
# Compileri offline



Nel nostro corso abbiamo utilizzato Overleaf per scrivere e compilare documenti in LaTeX, data la praticità di non dover installare il necessario in locale sui nostri dispositivi (trattandosi di un corso introduttivo), ma i servizi online possono avere restrizioni, ad esempio sul tempo di compilazione.

Se preferite gestire tutto in locale sul vostro PC, vi invitiamo a valutare alternative offline: **TeXLive** o **Tectonic** come motori, e **TexMaker** o **VSCode** con “**LaTeX Workshop**” come editor.

# Compilatori offline - TexMaker



L<sup>A</sup>T<sub>E</sub>X

# Compilatori offline - TexMaker



Quick Tabular

|   | c      | c      | l    | r     |
|---|--------|--------|------|-------|
| 1 | center | center | left | right |
| 2 | span   |        |      |       |
| 3 | aa     | bb     | cc   | dd    |

Num of Columns: 4  
Num of Rows: 3

Columns

Column: 4  
Alignment: Right  
Left Border: |  
Apply to all columns

Right Border (last column): |

Rows

Row: 3  
☒ Top Border  
☐ Merge columns: 1 -> 2  
Apply to all rows  
☒ Bottom Border (last row)  
☐ Add vertical margin for each row

OK Cancel

demo.tex

```
1 \documentclass[10pt,a4paper]{article}
2 \usepackage[utf8]{inputenc}
3 \usepackage{amsmath}
4 \usepackage{amssymb}
5 \usepackage{amssymb}
6 \begin{document}
7 \section{The first section}
8 \label{my label}
9 LaTeX is a high-quality typesetting system; it includes features
10 designed for the production of technical and scientific
11 documentation. LaTeX is the de facto standard for the
12 communication and publication of scientific documents.
13 \subsection{A sub section}
14 LaTeX is not a word processor! Instead, LaTeX encourages authors
15 not to worry too much about the appearance of their documents but
16 to concentrate on getting the right content. For example, consider
this document:
$ \rightarrow $
\end{document}
```

1 The first section

LaTeX is a high-quality typesetting system; it includes features designed for the production of technical and scientific documentation. LaTeX is the de facto standard for the communication and publication of scientific documents.

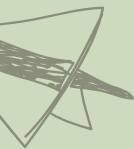
1.1 A sub section

LaTeX is not a word processor! Instead, LaTeX encourages authors not to worry too much about the appearance of their documents but to concentrate on getting the right content. For example, consider this document:

LaTeX is based on the idea that it is better to leave document design to document designers, and to let authors get on with writing documents. So, in LaTeX you would input this document as:

Structure Messages / Log Pdf Viewer Source Viewer Ready UTF-8 Normal Mode

L<sup>A</sup>T<sub>E</sub>X

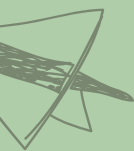


# BREAK

## 10 MINUTI

Rilassatevi

L<sup>A</sup>T<sub>E</sub>X

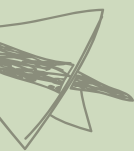


# LATEXLAB

## TEMPLATES

Intervento di Alessio Bandiera e Simone Bianco

L<sup>A</sup>T<sub>E</sub>X

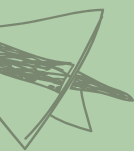


# BREAK

## 10 MINUTI

Rilassatevi

L<sup>A</sup>T<sub>E</sub>X

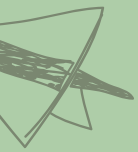


# LATEXLAB

## SAPTHERESIS

Intervento di Lorenzo Antonelli

LAT<sub>E</sub>X



# LATEXLAB

## PAPER

Intervento di Gabriella Trasciatti

L<sup>A</sup>T<sub>E</sub>X

# Esempi di pubblicazione



SIAM J. IMAGING SCIENCES  
Vol. 15, No. 4, pp. 1944–1976

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## A Quantum Information-Based Refoundation of Color Perception Concepts\*

Michel Berthier<sup>†</sup>, Nicoletta Prencipe<sup>‡</sup>, and Edoardo Provenzi<sup>§</sup>

**Abstract.** In this paper we deal with the problem of overcoming the intuitive definition of several color perception attributes by replacing them with novel mathematically rigorous ones. Our framework is a quantum-like color perception theory recently developed, which constitutes a radical change of view with respect to the classical Commission Interntional de l'Éclairage models and their color appearance counterparts. We show how quantum information concepts, (e.g., effects, generalized states, postmeasurement transformations, and relative entropy) provide tools that seem to be perfectly fit to model color perception attributes such as brightness, lightness, colorfulness, chroma, saturation, and hue. An illustration of the efficiency of these novel definitions is provided by the rigorous derivation of the so-called lightness constancy phenomenon.

**Key words.** color perception, quantum information, quantum effects, relative entropy

**MSC codes.** 81P45, 81Q99, 91E30, 94A17

**DOI.** 10.1137/22M1476071

**1. Introduction.** The foundation of every scientific theory relies on the precise choice of the ideal model through which intuitive concepts are converted into mathematical entities, which must be *rigorously defined* and whose properties are assumed to be the primitive axioms of the theory.

As we shall discuss more thoroughly later, while the axioms of color perception theory are well-established, several definitions of color attributes still remain at an intuitive level: as can be read in [51] or [18], paramount references in this domain, the classical color perception theory based on the Commission Interntional de l'Éclairage (CIE) construction is riddled by sloppy or circular definitions, as reported in section 2. A quite recent example of misleading use of chromatic terms is the excerpt “the chroma saturation level,” repeated 15 times in the paper [32], which appears in the official proceedings of the 11th Biennial Joint Meeting of the CIE/USA and CNC/CIE.

It is evident that the lack of precision in these definitions poses not only a serious problem for the theoretical foundation of a color perception model, but also for practical applications and measurements. These considerations justify the interest in trying to setting up a math-

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## The relativity of color perception

Michel Berthier<sup>a</sup>, Valérie Garcin<sup>b</sup>, Nicoletta Prencipe<sup>b,\*1</sup>, Edoardo Provenzi<sup>b</sup>

<sup>a</sup>Laboratoire MIA, La Rochelle Université, Avenue Albert Einstein, BP 33060, 17031, La Rochelle, France

<sup>b</sup>Université de Bordeaux, CNRS, Bordeaux INP, IMB, UMR 5251 F-33400, 351 Cours de la Libération, Talence, France



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### ABSTRACT

Physical colors, i.e. reflected or emitted lights entering the eyes from a visual environment, are converted into perceived colors sensed by humans by neurophysiological mechanisms. These processes involve both three types of photoreceptors, the LMS cones, and spectrally opponent and non-opponent interactions resulting from the activity rates of ganglion and lateral geniculate nucleus cells. Thus, color perception is a phenomenon inherently linked to an experimental environment (the visual scene) and an observing apparatus (the human visual system). This is clearly reminiscent of the conceptual foundation of both relativity and quantum mechanics, where the link is between a physical system and the measuring instruments. The relationship between color perception and relativity was explicitly examined for the first time by the physicist H. Yilmaz in 1962 from an experimental point of view. The main purpose of this contribution is to present a rigorous mathematical model that, by taking into account both trichromacy and color opponency, permits to explain on a purely theoretical basis the relativistic color perception phenomena argued by Yilmaz. Instead of relying directly on relativistic considerations, we base our theory on a quantum interpretation of color perception together with just one assumption, called trichromacy axiom, that summarizes well-established properties of trichromatic color vision within the framework of Jordan algebras. We show how this approach allows us to reconcile trichromacy with Hering's opponency and also to derive the relativistic properties of perceived colors without any additional mathematical or experimental assumption. In doing so, we also introduce several novel and mathematically rigorous definitions of chromatic attributes and discuss their counterparts in classical colorimetry. Finally, we underline the important role played by the Hilbert metric in our framework and its compatibility with known experimental data.

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### 1. Introduction

In the paper (Yilmaz, 1962b), H. Yilmaz, inspired by the mathematical physics of the special theory of relativity, explained how to derive colorimetric analogues of Lorentz transformations by exploiting the results of three color perception experiments. However, Yilmaz experiments have remained quite controversial

explain in Section 3, this framework relies mathematically on just one assumption, that we call ‘trichromacy axiom’, which is meant to sum up in a minimalist mathematical language what is known about the trichromatic aspects of color perception. The trichromacy axiom can be seen as an extended version of the well-established perceptual observations performed by Newton, Maxwell, Grassmann and von Helmholtz, elegantly summarized

L<sup>A</sup>T<sub>E</sub>X

# Subject classification



**MSC codes.** 81P45, 81Q99, 91E30, 94A17

[MSC2010 database](#) [MSC2020 database](#) [How to use the MSC](#)

**Browse Classification**  
Select a 2 digit classification  
**15 Linear and multilinear algebra; matrix theory**

**Search Classifications**  
Enter a keyword, phrase or a 2-, 3-, or 5-digit classification  
 **Search**

< 14-XX | [Up](#) | 16-XX > **Clear**

|                       |                                                                                                      |
|-----------------------|------------------------------------------------------------------------------------------------------|
| <b>15-XX</b>          | <b>Linear and multilinear algebra; matrix theory</b>                                                 |
| 15-00                 | General reference works (handbooks, dictionaries, bibliographies, etc.) pertaining to linear algebra |
| 15-01                 | Introductory exposition (textbooks, tutorial papers, etc.) pertaining to linear algebra              |
| 15-02                 | Research exposition (monographs, survey articles) pertaining to linear algebra                       |
| 15-03                 | History of linear algebra [Consider also classification numbers from Section <a href="#">01-XX</a> ] |
| 15-04                 | Software, source code, etc. for problems pertaining to linear algebra                                |
| 15-06                 | Proceedings, conferences, collections, etc. pertaining to linear algebra                             |
| 15-11                 | Research data for problems pertaining to linear algebra                                              |
| <a href="#">15Axx</a> | Basic linear algebra                                                                                 |
| <a href="#">15Bxx</a> | Special matrices                                                                                     |

< 14-XX | [Up](#) | 16-XX > **Clear**

# Bibliografia



 references.bib

```
@Article{KoMa14,
  title = {An Adaptive Shifted Power Method for Computing
           Generalized Tensor Eigenpairs},
  author = {Tamara G. Kolda and Jackson R. Mayo},
  doi = {10.1137/140951758},
  journal = {SIAM Journal on Matrix Analysis and Applications},
  number = 4,
  volume = 35,
  year = 2014,
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}

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  url = {https://www.siam.org/journals/pdf/stylemanual.pdf}}

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  howpublished = {SIAM Blogs},
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  month = nov,
  url = {http://blogs.siam.org/a-call-for-better-indexes/},
  urldate = {2015-04-05}
}
```

REFERENCES

[1] K. M. AUDENAERT AND J. EISERT, *Continuity bounds on the quantum relative entropy* –II, J. Math. Phys., 52 (2011), 112201.

[2] G. AULETTA, M. FORTUNATO, AND G. PARISI, *Quantum Mechanics*, Cambridge University Press, Cambridge, 2009.

[3] J. C. BAEZ, *Division algebras and quantum theory*, Found. Phys., 42 (2012), pp. 819–855.

[4] M. BERTHIER, *Geometry of color perception. Part 2: Perceived colors from real quantum states and Hering’s rebit*, J. Math. Neurosci., 10 (2020), pp. 1–25.

[5] M. BERTHIER, V. GARCIN, N. PRENCIPE, AND E. PROVENZI, *The relativity of color perception*, J. Math. Psych., 103 (2021), 102562.

[6] M. BERTHIER AND E. PROVENZI, *When geometry meets psycho-physics and quantum mechanics: Modern perspectives on the space of perceived colors*, in Proceedings of the International Conference on Geometric Science of Information 2019, Lecture Notes in Comput. Sci. 11712, Springer, Berlin, 2019, pp. 621–630.

[7] M. BERTHIER AND E. PROVENZI, *From Riemannian trichromacy to quantum color opponency via hyperbolicity*, J. Math. Imaging Vision, 63 (2021), pp. 681–688.

[8] M. BERTHIER AND E. PROVENZI, *Hunt’s colorimetric effect from a quantum measurement viewpoint*, in Proceedings of the International Conference on Geometric Science of Information, Lecture Notes in Comput. Sci. 12829, Springer, Berlin, 2021, pp. 172–180.

[9] M. BERTHIER AND E. PROVENZI, *The quantum nature of color perception: Uncertainty relations for chromatic opposition*, J. Imaging, 7 (2021).

[10] M. BERTHIER AND E. PROVENZI, *Quantum measurement and colour perception: Theory and applications*, Proc. A, 478 (2022), 20210508.

[11] P. J. BOUMA, *Physical Aspects of Colour*, Macmillan International Higher Education, London, 1971.

[12] P. BUSCH, M. GRABOWSKI, AND P. J. LAHTI, *Operational Quantum Physics*, Lecture Notes Phys. Monogr. 31, Springer New York, 1997.

[13] J. CORTESE, *Relative Entropy and Single Qubit Holevo-Schumacher-Westmoreland Channel Capacity*, arXiv:quant-ph/0207128, 2002.

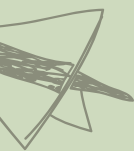
[14] K. K. DE VALOIS, *Seeing*, Academic Press, New York, 2000.

[15] R. L. DE VALOIS AND K. K. DE VALOIS, *Neural Coding of Color*, Vol. 2, MIT Press, Cambridge, MA, 1997.

[16] M. EBNER, *Color Constancy*, Wiley, New York, 2007.

[17] G. G. EMCH, *Algebraic Methods in Statistical Mechanics and Quantum Field Theory*, Courier North Chelmsford, MA, 2009.

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\bibliographystyle{siamplain}
\bibliography{references}
```

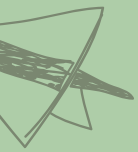


# BREAK

## 5 MINUTI

Rilassatevi

L<sup>A</sup>T<sub>E</sub>X



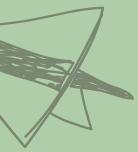
# LATEXLAB

## CURRICULUM

Intervento di Matteo Collica e Michele Gentile



L<sup>A</sup>T<sub>E</sub>X



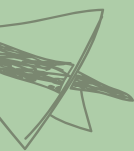
# LATEXLAB

## SLIDES

Intervento di Matteo Collica



L<sup>A</sup>T<sub>E</sub>X

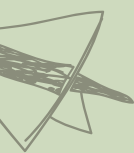


# LATEXLAB

## CONCLUSIONI

Lezione 2

L<sup>A</sup>T<sub>E</sub>X



**MATERIALI DEL CORSO**

L<sup>A</sup>T<sub>E</sub>X

# Bibliografia



Overleaf, Learn LaTeX in 30 minutes - [https://www.overleaf.com/learn/latex/Learn LaTeX in 30 minutes](https://www.overleaf.com/learn/latex/Learn_LaTeX_in_30_minutes)

Overleaf, Code listings - [https://www.overleaf.com/learn/latex/Code listing](https://www.overleaf.com/learn/latex/Code_listing)

Overleaf, Hyperlinks - <https://www.overleaf.com/learn/latex/Hyperlinks>

Overleaf, Align - [https://www.overleaf.com/learn/latex/Aligning equations with amsmath](https://www.overleaf.com/learn/latex/Aligning_equations_with_amsmath)

Overleaf, Parentesi - [https://it.overleaf.com/learn/latex/Brackets and Parentheses](https://it.overleaf.com/learn/latex/Brackets_and_Parentheses)

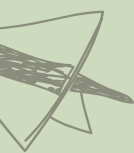
UW, csvsimple documentation - <https://ctan.math.washington.edu/tex-archive/macros/latex/contrib/csvsimple/csvsimple-l3.pdf>

Overleaf, Large projects - [https://www.overleaf.com/learn/latex/Management in a large project](https://www.overleaf.com/learn/latex/Management_in_a_large_project)

# Ringraziamenti



```
\begin{itemize}
  \item DI Help Desk:
    \begin{itemize}
      \item \textbf{Matteo Collica}: vice-delegato, relatore
      \item \textbf{Michele Vincenzo Gentile}: delegato, creatore slides
    \end{itemize}
  \item Interventi:
    \begin{itemize}
      \item \textbf{Lorenzo Antonelli}
      \item \textbf{Alessio Bandiera}
      \item \textbf{Simone Bianco}
      \item \textbf{Gabriella Trasciatti}
    \end{itemize}
\end{itemize}
```



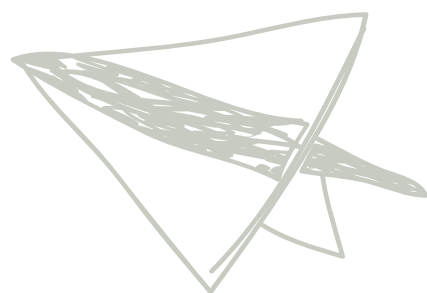
**FEEDBACK SUL CORSO**

L<sup>A</sup>T<sub>E</sub>X



SAPIENZA  
UNIVERSITÀ DI ROMA

Iniziative culturali e sociali  
degli studenti



# GRAZIE!

