

Full article name

Journal name, volume, pages, publication date

First Author, Second Author, Third Author

Student presentation of the Scientific working class
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Created and presented by: Student Name

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Guidelines to write presentation for Scientific working class

- Follow this presentation to get points for correctly using \LaTeX .
- Choose consistently one style for list environments.
- Do not copy paste content from any source without direct citation.
- Plagiarism and/or not providing sources will lead to penalties and the work might not be classified.
- Submissions of the students will be checked for plagiarism.

Preferred style of list environments

- Items that contain full sentences start with capital letter and end with full stop.
- If you use any other style, specify it explicitly upon your submission.
- Describe precisely how you write your items in itemize environments.

When the whole itemize environment acts as one sentence, the style is as follows:

- 1 first item starts with a small letter
- 2 following items as well
- 3 last item ends with a full stop.

Introduction

In the introduction of your presentation you should:

- put the article into the broader frame of the addressed topic
- add few references to the similar works
- add a reference to the review paper from the field
- motivate audience why it is important
- include descriptive image.

Do not forget to source your media properly



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Use itemize and enumerate to list points

Scientific working is a social discipline that includes:

- doing own research and science
- working in the teams
- raising money
- publishing papers
- giving presentations
- evaluating others people work.

This class will strengthen your skills in:

- ① giving presentations on scientific topics
- ② working in the teams
- ③ evaluating work of other people.

Managing literature

- Use JabRef <http://www.jabref.org/> to manage literature list and create literature.bib file.
- Bibtex entries can be downloaded from scholar.google.com, books.google.com or imported to JabRef.
- Cite in the author year format. Example: It can be shown that cracks can be modelled by nonlinear equations, see (Vojtěch Kulvait, Josef Málek, and K. R. Rajagopal 2012).
- Use *biblatex* to manage literature list.
- The document <https://ctan.kako-dev.de/macros/latex/contrib/biblatex/doc/biblatex.pdf> provide an extensive overview of *biblatex*.

Citation styles

- You can inline citation into the footnote. Example: As has been shown recently¹, Titanium alloys elastic response could not be modeled as linear.
- When citing a part from a large work, use appropriate in work referencing. Example: Vojtěch Kulvait performed number of numerical simulations in his Doctoral thesis, see (Vojtěch Kulvait 2017, p. 83-125).
- When using image from the paper you present, in citation put also the page of the article from which image was taken.

¹V Kulvait, J Málek, and KR Rajagopal (2017). "Modeling Gum Metal and other newly developed titanium alloys within a new class of constitutive relations for elastic bodies." In: *Archives of Mechanics* 69.3.

Equations

- Never copy paste images of equations from the original article.
- Manual how to typeset mathematics in LaTeX, see <https://en.wikibooks.org/wiki/LaTeX/Mathematics>.
- Use equation environment to highlight important equations and put inline equations between two dollar symbols.

Example complex equation from (Kulvait, Málek, and K. Rajagopal 2017, p. 229)

$$\begin{aligned}\sigma_1(\text{tr } \mathbf{T}) &= \frac{1}{3K} \left(\frac{\tau_K^2 + |\text{tr } \mathbf{T}|^2}{\tau_K^2} \right)^{\frac{s'-2}{2}}, \\ \sigma_2(|\mathbf{T}^d|) &= \frac{1}{2\mu} \left(\frac{\tau_\mu^2 + |\mathbf{T}^d|^2}{\tau_\mu^2} \right)^{\frac{q'-2}{2}}.\end{aligned}\tag{1}$$

Further instructions to typesetting math

- Read the <https://www.latex-tutorial.com/tutorials/amsmath/tutorial>.
- Use packages such as *amsmath*, *amssymb*, *amsfonts*.
- Do not put a normal text into the math environments.

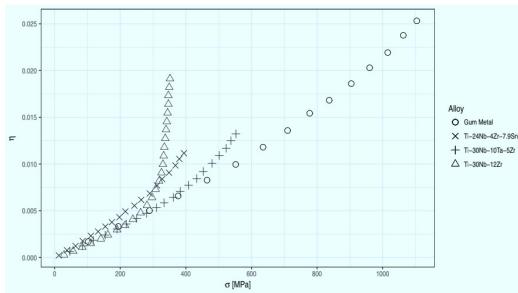
Tables

- Never copy paste tables from the original article.
- You can create tables using dedicated tools, see <https://www.tablesgenerator.com/>.
- Use table environment and cite source of the data in a table caption.

Figures

- Cite figure from the article including the page.
- Use figure floating environment.

Example



Stress strain relation of Gum Metal, see (Kulvait, Málek, and K. Rajagopal 2017, p. 226).

Typesetting units and other stuff

- Use *siunitx* package.
- The size of the tank is 10 m^3 is typesetted as `\SI{10}{\metre^{3}}`.
- Use dedicated packages for typesetting code, chemistry, algorithms ...

Summary

- Don't forget to put in the summary.
- Try to reduce LaTeX warnings number.
- Resolve any LaTeX errors.

Literature I



Kulvait, V, J Málek, and KR Rajagopal (2017). "Modeling Gum Metal and other newly developed titanium alloys within a new class of constitutive relations for elastic bodies." . In: *Archives of Mechanics* 69.3.



Kulvait, Vojtěch (2017). "Mathematical analysis and computer simulations of deformation of nonlinear elastic bodies in the small strain range." . PhD thesis. Charles University, Faculty of mathematics and physics.



Kulvait, Vojtěch, Josef Málek, and K. R. Rajagopal (2012). "Anti-plane stress state of a plate with a V-notch for a new class of elastic solids" . In: *International Journal of Fracture* 179.1-2, pp. 59–73. DOI: 10.1007/s10704-012-9772-5.