



Philosophical Problems in Science

**No 77
2024**

Philosophical Problems in Science

**Zagadnienia Filozoficzne
w Nauce**

© Copernicus Center Foundation & Authors, 2024

Except as otherwise noted, the material in this issue is licenced under the Creative Commons BY-NC-ND licence. To view a copy of this licence, visit <http://creativecommons.org/licenses/by-nc-nd/4.0>.

Editorial Board

Roman Krzanowski

Łukasz Mścislowski (Editorial Secretary)

Michał Heller

Paweł Jan Polak (Editor-in-Chief)

Kristina Šekrst

Igor Wysocki

Piotr Urbańczyk (Deputy Editor-in-Chief)

e-ISSN 2451-0602 (electronic format)

ISSN 0867-8286 (print format, discontinued)

Editorial Office

Philosophical Problems in Science (ZFN)

e-mail: info@zfn.edu.pl

www.zfn.edu.pl



**Copernicus
Center**

Publisher: Copernicus Center Foundation
Pl. Szczepański 8, 31-011 Kraków POLAND
tel. (+48) 12 422 44 59
e-mail: info@copernicuscenter.edu.pl
www.copernicuscenter.edu.pl

Philosophical Problems in Science

Zagadnienia Filozoficzne w Nauce

77 — 2024

Editorial

F. Author, S. Author, T. Author, F.T. Author	
<i>Philosophical Problems in Science (ZFN) sample template class file</i>	1

Articles

F. Author, S. Author, T. Author, F.T. Author	
<i>Philosophical Problems in Science (ZFN) sample template class file</i>	9
F. Author, S. Author, T. Author, F.T. Author	
<i>Philosophical Problems in Science (ZFN) sample template class file</i>	15

Review essays

F. Author, S. Author, T. Author, F.T. Author	
<i>Philosophical Problems in Science (ZFN) sample template class file</i>	23

ARTICLE

Philosophical Problems in Science (ZFN) sample template class file

F. Author,^{*†} S. Author,[‡] T. Author,[‡] and F.T. Author[¶]

[†]First Division, Organization, City, Pincode, State, Country

[‡]Second Division, Organization, City, Pincode, State, Country

[¶]Fourth Division, Organization, City, Pincode, State, Country

*Corresponding author. Email: first.author@address.edu

(Received 12.12.2024; revised 12.12.2024; accepted 12.12.2024)

Abstract

Insert abstract text here. Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.

Keywords: keyword entry 1, keyword entry 2, keyword entry 3

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.

1. Insert A head here

This demo file is intended to serve as a “starter file”. It is for preparing manuscript submission only, not for preparing camera-ready versions of manuscripts. Manuscripts will be typeset for publication by the journal, after they have been accepted.

By default, this template uses `biblatex` and adopts the Chicago referencing style. If you are using this template on Overleaf, Overleaf’s build tool will automatically run `pdflatex` and `biber`. If you are compiling this template on your own local \LaTeX installation, please execute the following commands:

1. `pdflatex sample`
2. `biber sample`

3. pdf_latex sample

4. pdf_latex sample

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.

1.1 Insert B head here

Subsection text here. Lorem ipsum (Bayer–Santos et al. 2013) dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore (Adade, Castro, and Soares 2007) et dolore magna aliqua.

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.

1.1.1 Insert C head here

Subsubsection text here. Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do¹ eiusmod tempor incididunt ut labore et dolore magna aliqua.

2. Equations

Sample equations. Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Lorem ipsum dolor sit amet, consectetur² adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.

$$\begin{aligned}
\frac{\partial u(t, x)}{\partial t} &= Au(t, x) \left(1 - \frac{u(t, x)}{K} \right) - B \frac{u(t - \tau, x)w(t, x)}{1 + Eu(t - \tau, x)}, \\
\frac{\partial w(t, x)}{\partial t} &= \delta \frac{\partial^2 w(t, x)}{\partial x^2} - Cw(t, x) + D \frac{u(t - \tau, x)w(t, x)}{1 + Eu(t - \tau, x)},
\end{aligned} \tag{1}$$

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.

$$\begin{aligned}
\frac{dU}{dt} &= \alpha U(t)(\gamma - U(t)) - \frac{U(t - \tau)W(t)}{1 + U(t - \tau)}, \\
\frac{dW}{dt} &= -W(t) + \beta \frac{U(t - \tau)W(t)}{1 + U(t - \tau)}.
\end{aligned} \tag{2}$$

$$\begin{aligned}
\frac{\partial(F_1, F_2)}{\partial(c, \omega)} \Big|_{(c_0, \omega_0)} &= \begin{vmatrix} \frac{\partial F_1}{\partial c} & \frac{\partial F_1}{\partial \omega} \\ \frac{\partial F_2}{\partial c} & \frac{\partial F_2}{\partial \omega} \end{vmatrix} \Big|_{(c_0, \omega_0)} \\
&= -4c_0 q \omega_0 - 4c_0 \omega_0 p^2 = -4c_0 \omega_0 (q + p^2) > 0.
\end{aligned}$$

3. Figures & Tables

The output for a single-column figure is in Figure 1. Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.

See example table in Table 1.

4. Conclusion

The conclusion text goes here.

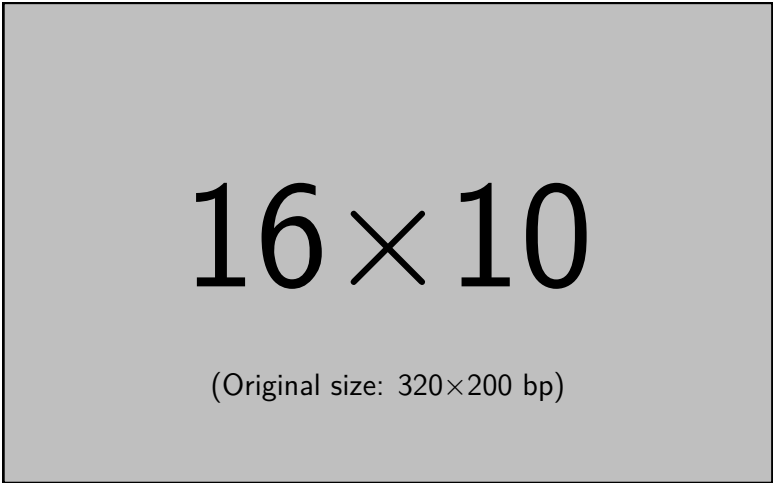


Figure 1. Insert figure caption here

Table 1. An Example of a Table

Column head 1	Column head 2	Column head 3	Column head 4
One ^a	Two	three three	four
Three	Four	three three ^b	four

Table note

a First note

b Another table note

Acknowledgement

Insert the Acknowledgment text here.

Funding Statement This research was supported by grants from the <funder-name> <doi> (<award ID>); <funder-name> <doi> (<award ID>).

Competing Interests A statement about any financial, professional, contractual or personal relationships or situations that could be perceived to impact the presentation of the work — or ‘None’ if none exist.

Notes

- 1 A footnote/endnote
- 2 Another footnote/endnote

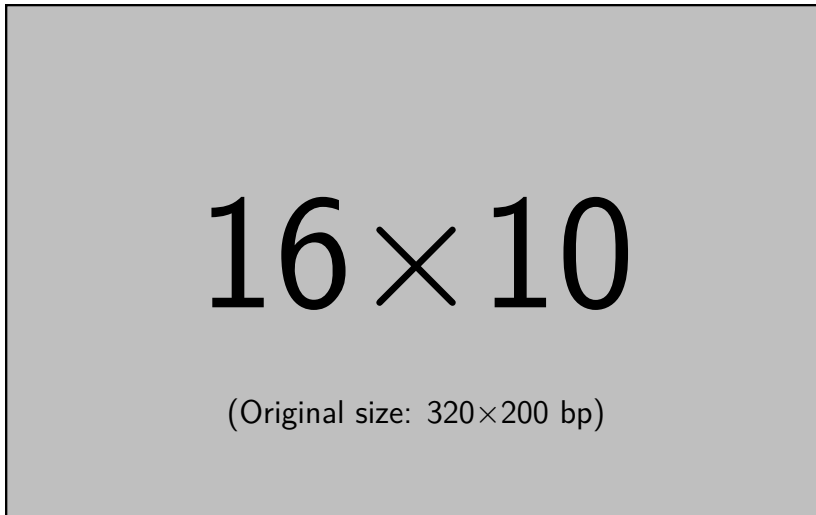


Figure 2. Insert figure caption here

References

- Adade, Camila M, Solange L de Castro, and Maurilio J Soares. 2007. Ultrastructural localization of *Trypanosoma cruzi* lysosomes by aryl sulphatase cytochemistry. *Micron* 38 (3): 252–256.
- Bayer-Santos, Ethel, Clemente Aguilar-Bonavides, Silas Pessini Rodrigues, Esteban Maurício Cordero, Alexandre Ferreira Marques, Armando Varela-Ramirez, Hyungwon Choi, Nobuko Yoshida, José Franco Da Silveira, and Igor C Almeida. 2013. Proteomic analysis of trypanosoma cruzi secretome: characterization of two populations of extracellular vesicles and soluble proteins. *Journal of Proteome Research* 12 (2): 883–897.

Appendix 1. Example Appendix Section

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.

Articles

ARTICLE

Philosophical Problems in Science (ZFN) sample template class file

F. Author,^{*†} S. Author,[‡] T. Author,[‡] and F.T. Author[¶]

[†]First Division, Organization, City, Pincode, State, Country

[‡]Second Division, Organization, City, Pincode, State, Country

[¶]Fourth Division, Organization, City, Pincode, State, Country

*Corresponding author. Email: first.author@address.edu

(Received 12.12.2024; revised 12.12.2024; accepted 12.12.2024)

Abstract

Insert abstract text here. Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.

Keywords: keyword entry 1, keyword entry 2, keyword entry 3

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.

1. Insert A head here

This demo file is intended to serve as a “starter file”. It is for preparing manuscript submission only, not for preparing camera-ready versions of manuscripts. Manuscripts will be typeset for publication by the journal, after they have been accepted.

By default, this template uses `biblatex` and adopts the Chicago referencing style. If you are using this template on Overleaf, Overleaf’s build tool will automatically run `pdflatex` and `biber`. If you are compiling this template on your own local \LaTeX installation, please execute the following commands:

1. `pdflatex sample`
2. `biber sample`

3. pdf_latex sample

4. pdf_latex sample

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.

1.1 Insert B head here

Subsection text here. Lorem ipsum (Bayer-Santos et al. 2013) dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore (Adade, Castro, and Soares 2007) et dolore magna aliqua.

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.

1.1.1 Insert C head here

Subsubsection text here. Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do¹ eiusmod tempor incididunt ut labore et dolore magna aliqua.

2. Equations

Sample equations. Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Lorem ipsum dolor sit amet, consectetur² adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.

$$\begin{aligned}
\frac{\partial u(t, x)}{\partial t} &= Au(t, x) \left(1 - \frac{u(t, x)}{K} \right) - B \frac{u(t - \tau, x)w(t, x)}{1 + Eu(t - \tau, x)}, \\
\frac{\partial w(t, x)}{\partial t} &= \delta \frac{\partial^2 w(t, x)}{\partial x^2} - Cw(t, x) + D \frac{u(t - \tau, x)w(t, x)}{1 + Eu(t - \tau, x)},
\end{aligned} \tag{1}$$

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.

$$\begin{aligned}
\frac{dU}{dt} &= \alpha U(t)(\gamma - U(t)) - \frac{U(t - \tau)W(t)}{1 + U(t - \tau)}, \\
\frac{dW}{dt} &= -W(t) + \beta \frac{U(t - \tau)W(t)}{1 + U(t - \tau)}.
\end{aligned} \tag{2}$$

$$\begin{aligned}
\frac{\partial(F_1, F_2)}{\partial(c, \omega)} \Big|_{(c_0, \omega_0)} &= \begin{vmatrix} \frac{\partial F_1}{\partial c} & \frac{\partial F_1}{\partial \omega} \\ \frac{\partial F_2}{\partial c} & \frac{\partial F_2}{\partial \omega} \end{vmatrix} \Big|_{(c_0, \omega_0)} \\
&= -4c_0 q \omega_0 - 4c_0 \omega_0 p^2 = -4c_0 \omega_0 (q + p^2) > 0.
\end{aligned}$$

3. Figures & Tables

The output for a single-column figure is in Figure 1. Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.

See example table in Table 1.

4. Conclusion

The conclusion text goes here.

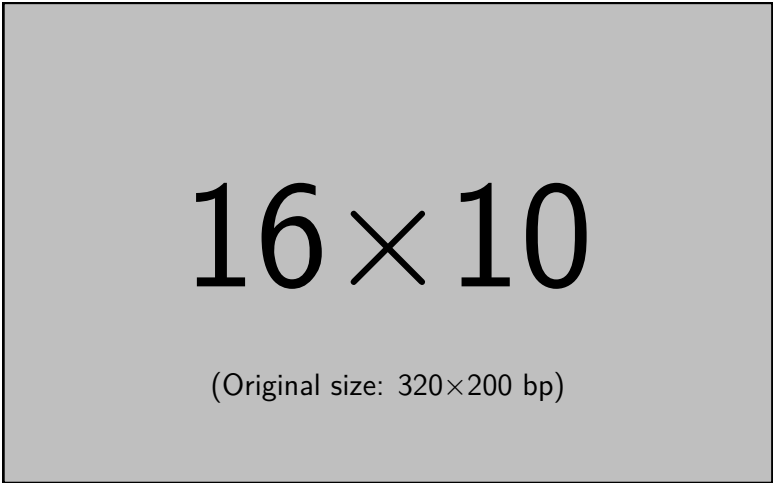


Figure 1. Insert figure caption here

Table 1. An Example of a Table

Column head 1	Column head 2	Column head 3	Column head 4
One ^a	Two	three three	four
Three	Four	three three ^b	four

Table note
a First note
b Another table note

Acknowledgement

Insert the Acknowledgment text here.

Funding Statement This research was supported by grants from the <funder-name> <doi> (<award ID>); <funder-name> <doi> (<award ID>).

Competing Interests A statement about any financial, professional, contractual or personal relationships or situations that could be perceived to impact the presentation of the work — or ‘None’ if none exist.

Notes

- 1 A footnote/endnote
- 2 Another footnote/endnote

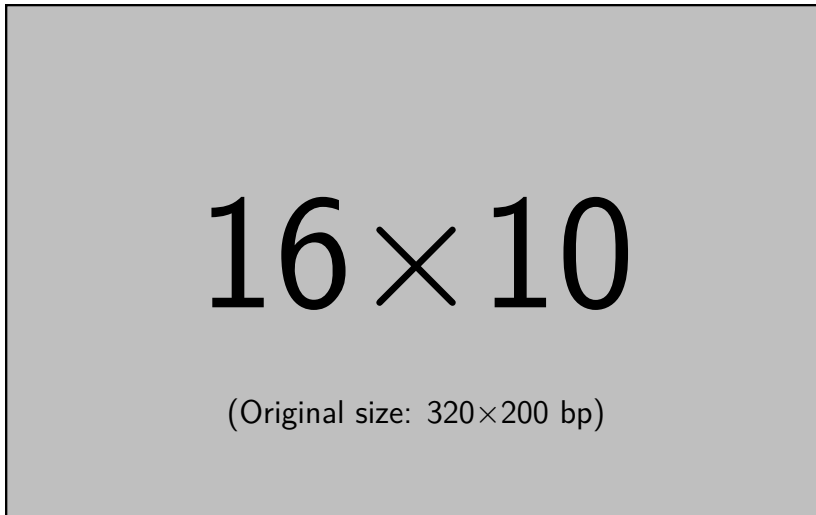


Figure 2. Insert figure caption here

References

- Adade, Camila M, Solange L de Castro, and Maurilio J Soares. 2007. Ultrastructural localization of *Trypanosoma cruzi* lysosomes by aryl sulphatase cytochemistry. *Micron* 38 (3): 252–256.
- Bayer-Santos, Ethel, Clemente Aguilar-Bonavides, Silas Pessini Rodrigues, Esteban Maurício Cordero, Alexandre Ferreira Marques, Armando Varela-Ramirez, Hyungwon Choi, Nobuko Yoshida, José Franco Da Silveira, and Igor C Almeida. 2013. Proteomic analysis of trypanosoma cruzi secretome: characterization of two populations of extracellular vesicles and soluble proteins. *Journal of Proteome Research* 12 (2): 883–897.

Appendix 1. Example Appendix Section

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.



ARTICLE

Philosophical Problems in Science (ZFN) sample template class file

F. Author,^{*†} S. Author,[‡] T. Author,[‡] and F.T. Author[¶]

[†]First Division, Organization, City, Pincode, State, Country

[‡]Second Division, Organization, City, Pincode, State, Country

[¶]Fourth Division, Organization, City, Pincode, State, Country

*Corresponding author. Email: first.author@address.edu

(Received 12.12.2024; revised 12.12.2024; accepted 12.12.2024)

Abstract

Insert abstract text here. Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.

Keywords: keyword entry 1, keyword entry 2, keyword entry 3

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.

1. Insert A head here

This demo file is intended to serve as a “starter file”. It is for preparing manuscript submission only, not for preparing camera-ready versions of manuscripts. Manuscripts will be typeset for publication by the journal, after they have been accepted.

By default, this template uses `biblatex` and adopts the Chicago referencing style. If you are using this template on Overleaf, Overleaf’s build tool will automatically run `pdflatex` and `biber`. If you are compiling this template on your own local \LaTeX installation, please execute the following commands:

1. `pdflatex sample`
2. `biber sample`

3. pdf_latex sample

4. pdf_latex sample

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.

1.1 Insert B head here

Subsection text here. Lorem ipsum (Bayer-Santos et al. 2013) dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore (Adade, Castro, and Soares 2007) et dolore magna aliqua.

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.

1.1.1 Insert C head here

Subsubsection text here. Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do¹ eiusmod tempor incididunt ut labore et dolore magna aliqua.

2. Equations

Sample equations. Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Lorem ipsum dolor sit amet, consectetur² adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.

$$\begin{aligned}
\frac{\partial u(t, x)}{\partial t} &= Au(t, x) \left(1 - \frac{u(t, x)}{K} \right) - B \frac{u(t - \tau, x)w(t, x)}{1 + Eu(t - \tau, x)}, \\
\frac{\partial w(t, x)}{\partial t} &= \delta \frac{\partial^2 w(t, x)}{\partial x^2} - Cw(t, x) + D \frac{u(t - \tau, x)w(t, x)}{1 + Eu(t - \tau, x)},
\end{aligned} \tag{1}$$

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.

$$\begin{aligned}
\frac{dU}{dt} &= \alpha U(t)(\gamma - U(t)) - \frac{U(t - \tau)W(t)}{1 + U(t - \tau)}, \\
\frac{dW}{dt} &= -W(t) + \beta \frac{U(t - \tau)W(t)}{1 + U(t - \tau)}.
\end{aligned} \tag{2}$$

$$\begin{aligned}
\frac{\partial(F_1, F_2)}{\partial(c, \omega)} \Big|_{(c_0, \omega_0)} &= \begin{vmatrix} \frac{\partial F_1}{\partial c} & \frac{\partial F_1}{\partial \omega} \\ \frac{\partial F_2}{\partial c} & \frac{\partial F_2}{\partial \omega} \end{vmatrix} \Big|_{(c_0, \omega_0)} \\
&= -4c_0 q \omega_0 - 4c_0 \omega_0 p^2 = -4c_0 \omega_0 (q + p^2) > 0.
\end{aligned}$$

3. Figures & Tables

The output for a single-column figure is in Figure 1. Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.

See example table in Table 1.

4. Conclusion

The conclusion text goes here.

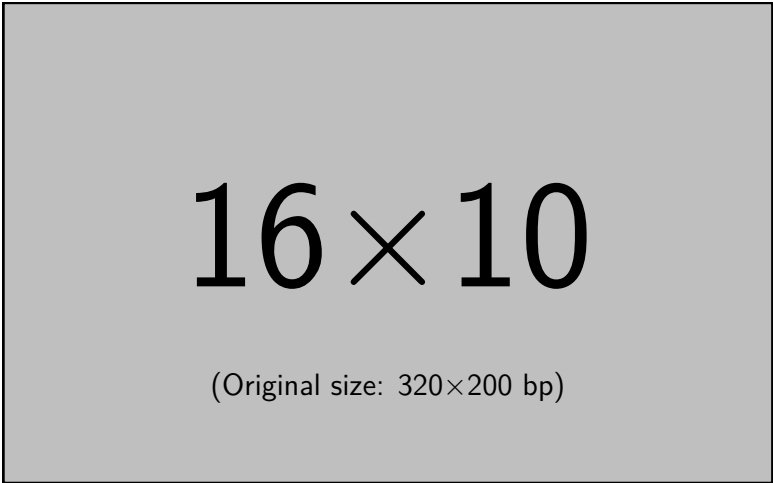


Figure 1. Insert figure caption here

Table 1. An Example of a Table

Column head 1	Column head 2	Column head 3	Column head 4
One ^a	Two	three three	four
Three	Four	three three ^b	four

Table note

- a First note
- b Another table note

Acknowledgement

Insert the Acknowledgment text here.

Funding Statement This research was supported by grants from the <funder-name> <doi> (<award ID>); <funder-name> <doi> (<award ID>).

Competing Interests A statement about any financial, professional, contractual or personal relationships or situations that could be perceived to impact the presentation of the work — or ‘None’ if none exist.

Notes

- 1 A footnote/endnote
- 2 Another footnote/endnote

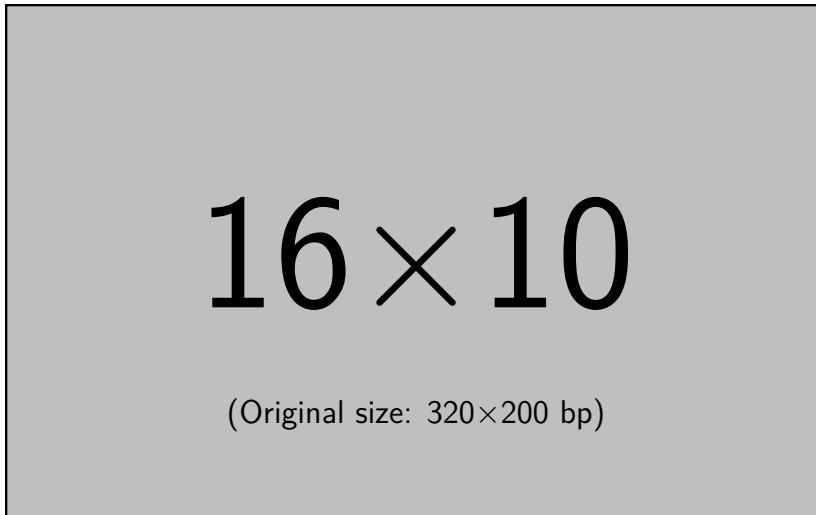


Figure 2. Insert figure caption here

References

- Adade, Camila M, Solange L de Castro, and Maurilio J Soares. 2007. Ultrastructural localization of *Trypanosoma cruzi* lysosomes by aryl sulphatase cytochemistry. *Micron* 38 (3): 252–256.
- Bayer-Santos, Ethel, Clemente Aguilar-Bonavides, Silas Pessini Rodrigues, Esteban Maurício Cordero, Alexandre Ferreira Marques, Armando Varela-Ramirez, Hyungwon Choi, Nobuko Yoshida, José Franco Da Silveira, and Igor C Almeida. 2013. Proteomic analysis of trypanosoma cruzi secretome: characterization of two populations of extracellular vesicles and soluble proteins. *Journal of Proteome Research* 12 (2): 883–897.

Appendix 1. Example Appendix Section

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.

Review essays



ARTICLE

Philosophical Problems in Science (ZFN) sample template class file

F. Author,^{*†} S. Author,[‡] T. Author,[‡] and F.T. Author[¶]

[†]First Division, Organization, City, Pincode, State, Country

[‡]Second Division, Organization, City, Pincode, State, Country

[¶]Fourth Division, Organization, City, Pincode, State, Country

*Corresponding author. Email: first.author@address.edu

(Received 12.12.2024; revised 12.12.2024; accepted 12.12.2024)

Abstract

Insert abstract text here. Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.

Keywords: keyword entry 1, keyword entry 2, keyword entry 3

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.

1. Insert A head here

This demo file is intended to serve as a “starter file”. It is for preparing manuscript submission only, not for preparing camera-ready versions of manuscripts. Manuscripts will be typeset for publication by the journal, after they have been accepted.

By default, this template uses `biblatex` and adopts the Chicago referencing style. If you are using this template on Overleaf, Overleaf’s build tool will automatically run `pdflatex` and `biber`. If you are compiling this template on your own local \LaTeX installation, please execute the following commands:

1. `pdflatex sample`
2. `biber sample`

3. pdf_latex sample

4. pdf_latex sample

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.

1.1 Insert B head here

Subsection text here. Lorem ipsum (Bayer-Santos et al. 2013) dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore (Adade, Castro, and Soares 2007) et dolore magna aliqua.

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.

1.1.1 Insert C head here

Subsubsection text here. Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do¹ eiusmod tempor incididunt ut labore et dolore magna aliqua.

2. Equations

Sample equations. Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Lorem ipsum dolor sit amet, consectetur² adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.

$$\begin{aligned}
\frac{\partial u(t, x)}{\partial t} &= Au(t, x) \left(1 - \frac{u(t, x)}{K} \right) - B \frac{u(t - \tau, x)w(t, x)}{1 + Eu(t - \tau, x)}, \\
\frac{\partial w(t, x)}{\partial t} &= \delta \frac{\partial^2 w(t, x)}{\partial x^2} - Cw(t, x) + D \frac{u(t - \tau, x)w(t, x)}{1 + Eu(t - \tau, x)},
\end{aligned} \tag{1}$$

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.

$$\begin{aligned}
\frac{dU}{dt} &= \alpha U(t)(\gamma - U(t)) - \frac{U(t - \tau)W(t)}{1 + U(t - \tau)}, \\
\frac{dW}{dt} &= -W(t) + \beta \frac{U(t - \tau)W(t)}{1 + U(t - \tau)}.
\end{aligned} \tag{2}$$

$$\begin{aligned}
\frac{\partial(F_1, F_2)}{\partial(c, \omega)} \Big|_{(c_0, \omega_0)} &= \begin{vmatrix} \frac{\partial F_1}{\partial c} & \frac{\partial F_1}{\partial \omega} \\ \frac{\partial F_2}{\partial c} & \frac{\partial F_2}{\partial \omega} \end{vmatrix} \Big|_{(c_0, \omega_0)} \\
&= -4c_0 q \omega_0 - 4c_0 \omega_0 p^2 = -4c_0 \omega_0 (q + p^2) > 0.
\end{aligned}$$

3. Figures & Tables

The output for a single-column figure is in Figure 1. Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.

See example table in Table 1.

4. Conclusion

The conclusion text goes here.

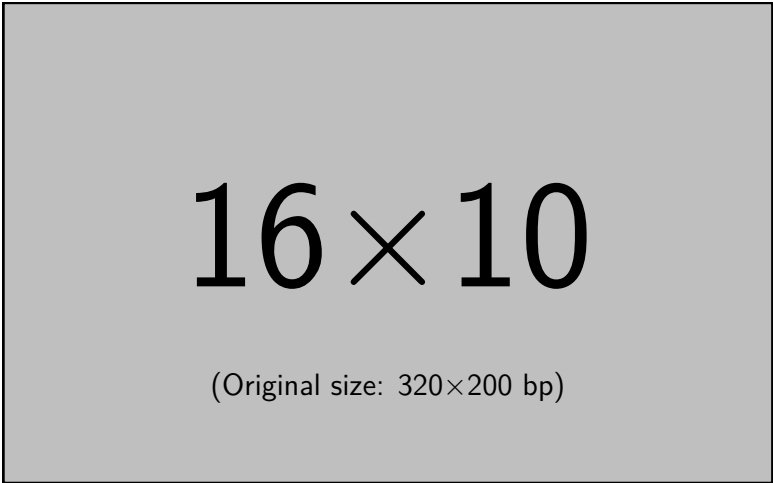


Figure 1. Insert figure caption here

Table 1. An Example of a Table

Column head 1	Column head 2	Column head 3	Column head 4
One ^a	Two	three three	four
Three	Four	three three ^b	four

Table note
a First note
b Another table note

Acknowledgement

Insert the Acknowledgment text here.

Funding Statement This research was supported by grants from the <funder-name> <doi> (<award ID>); <funder-name> <doi> (<award ID>).

Competing Interests A statement about any financial, professional, contractual or personal relationships or situations that could be perceived to impact the presentation of the work — or ‘None’ if none exist.

Notes

- 1 A footnote/endnote
- 2 Another footnote/endnote

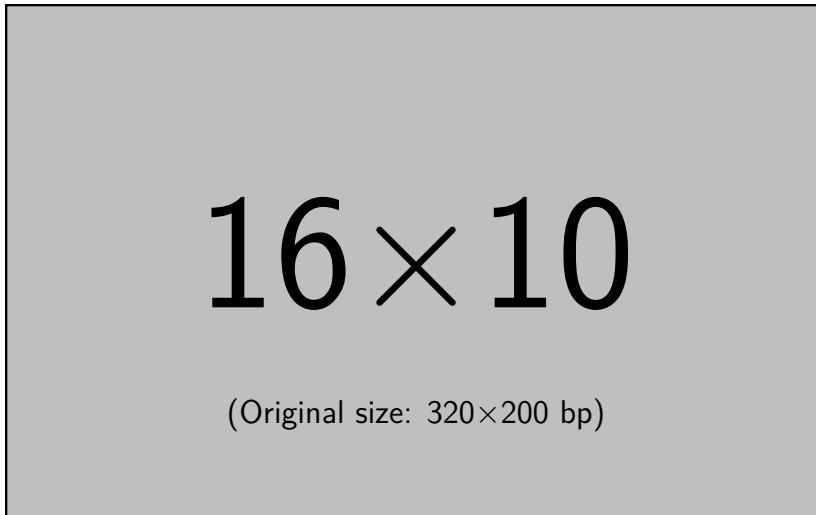


Figure 2. Insert figure caption here

References

- Adade, Camila M, Solange L de Castro, and Maurilio J Soares. 2007. Ultrastructural localization of *Trypanosoma cruzi* lysosomes by aryl sulphatase cytochemistry. *Micron* 38 (3): 252–256.
- Bayer-Santos, Ethel, Clemente Aguilar-Bonavides, Silas Pessini Rodrigues, Esteban Maurício Cordero, Alexandre Ferreira Marques, Armando Varela-Ramirez, Hyungwon Choi, Nobuko Yoshida, José Franco Da Silveira, and Igor C Almeida. 2013. Proteomic analysis of trypanosoma cruzi secretome: characterization of two populations of extracellular vesicles and soluble proteins. *Journal of Proteome Research* 12 (2): 883–897.

Appendix 1. Example Appendix Section

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.