# LATEX (PAPERS & TALK SLIDES)

The following steps walk you through Latex, which provides THE tool for writing scientific papers (or notes) and also scientific talks, especially when formulae and equations are involved. We will use the webpage based interface Overleaf.

You find this hand-out and template files on the following webpage: http://www.eg.bucknell.edu/~kvollmay/summerresearch/

## Overleaf

## 1. Log Into Overleaf: Go to

https://www.overleaf.com/ and on the top right click on LogIn.

(I am assuming that as Bucknell student you automatically are registered.) As username use your Bucknell email address (e.g. for me kvollmay@bucknell.edu) keep the Password entry empty. Click on "Log in with Google" (and if prompted this is like getting into your Bucknell gmail).

If the Log in with Google worked, you are done with step 1, so skip the next few lines. If the LogIn does not work via Log in with Google, then

1i. Register at Overleaf (only once):

This step you have to  $\mathbf{do}$  only once. (So if you already are registered, please skip step 1i.)

Go to

https://www.overleaf.com/

and register. Remember your username and password.

1ii Log Into Overleaf:

Go to

https://www.overleaf.com/

and on the top right click on LogIn. Use the same credentials you used when you registered.

# Paper or Notes

### 2. Download Template zip-file:

Go to the webpage:

http://www.eg.bucknell.edu/~kvollmay/summerresearch/

Download from this webpage the file beamer\_example\_All.zip (see section In-Class Work, June 15, 2022, Template for Talk).

To download either just use left-mouse click on templateWithBibAll.zip and OK, or right-mouse click on templateWithBibAll.zip, then select Save-Link-As and then Save.

3. In Overleaf: Upload a New Project: On the top left click NewProject and then Upload Project. Click on "Select a .zip file" and select the file templateWithBibAll.zip (from your computer, where it got downloaded in step 2).

**4.** Edit Project: Click on the Project and you will find both, on the left you can edit the templateWithBib.tex and on the right it gets automatically compiled. <sup>1</sup>

To change the name of this project, on the top get the cursor next to "This is the title" and click the edit icon to change the name, e.g. to PaperTemplate.

- 5. Copy Project: To make a copy of the template project for your own project, click on the left arrow, then on the right side of PaperTemplate (or whatever name you chose in step 4) click on on the first symbol, which is the copy symbol. It offers you to rename the copy of the project right then.
- **6.** Upload Single File Within Project: To upload a single file (e.g. a figure) while working on a project, click on one of your files (on the left on the three dots, then choose NewFile, then Upload and then Select.
- 7. Download project To download the source files of a project, go to Menue, then click on Source. That will download a zip-file.

### 8. Title and Sections

In Overleaf in your own project (copied), or in linux environment copy templateWithBib to a tex-file (with a different name) which you will use to write your paper. In this file change the title (search for \title). Look at the resulting document. Next change the sections (\section) and make more than one section by using the command multiple times.

#### 9. Formulae

Next look at the equations Eq.(1) and Eq.(2). Try modifying these equations to the equations for the model of your project. Check the resulting pdf-file. See below where you can get more information.

#### 10. References

You can add references to myRefs.bib and then cite them in templateWithBib.tex with \cite.

## Talk Slides

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For editing etc. please see above the steps for using overleaf for papers.

<sup>&</sup>lt;sup>1</sup>If you like to use vim as your editor, select the project you want to edit, then click on the top left on Menue, then scroll down to keybindings and select vim