

Ph3 LaTeX Week 8: Formatting for and submitting to a journal, REVTeX

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1 Introduction

The ultimate goal of writing a scientific article is to publish it. After all, if you discover or create something of significance but don't communicate it to anyone, it may as well have never happened. Results kept secret benefit no one. Even the temporary glow you get from knowing that you discovered something first wears off quickly. You have a debt to society to communicate your results, first to your peers and second to the world at large. After all, most scientific research is federally funded, and that means paid for by taxpayers. They deserve to have access to your results, as do your colleagues whose work you built on and who will subsequently build upon your work. Science is not done in a vacuum. It is a social endeavor, and communication of your results is an essential component to that.

The state of scientific publishing is very much in flux at the time of this writing, with the old model of peer-review rapidly being displaced by simple uploading to the e-Print archives at <https://arxiv.org/>. Even when an author decides to submit a work to a journal and subject it to peer review, it is common practice to upload the paper to the e-Print archives first. I encourage you to follow this model, at least as of the time of this writing. Don't be afraid of the peer-review process, but upload your paper to the archives before you start it.

2 Templates

Most academic journals or societies provide packages for typesetting according to the fashion of their kind. Overleaf has many of these packages built in, along with templates for using them, and you can access them by choosing *New Project* and then *Academic Journal*. You will then be presented with a selection of templates you can search or scroll through to find the one you want.

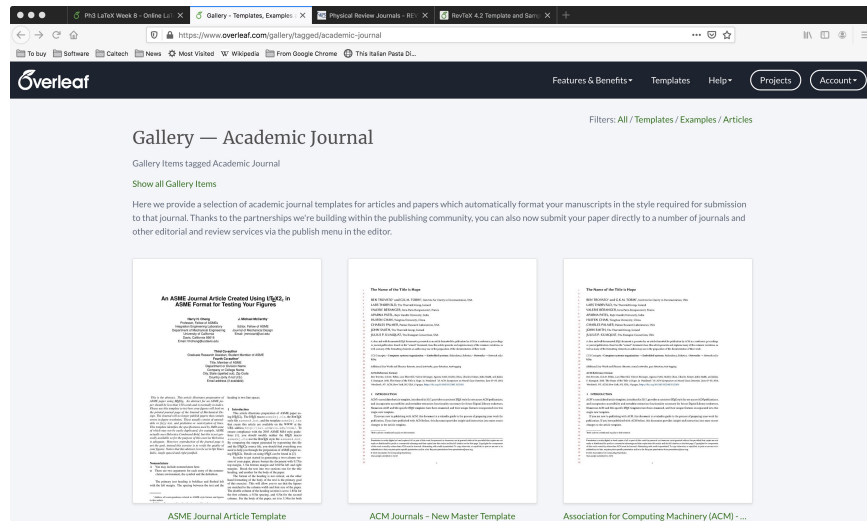


Figure 1: When you start a new project in Overleaf, choose *Academic Journal* as its type, and you will be presented with a choice of templates for a wide variety of journals.

3 The Physical Review and REVTeX

There are many, many academic journals in which you can publish your results. Selecting which one is appropriate is an integral part of the publishing process, and it depends primarily on the content and significance of your work.

The American Physical Society provides a template for typesetting for their journals called REVTeX, which allows authors to format for the various versions of the Physical Review [2]. REVTeX does not normally come with most latex distributions, and if you want to use it on your own computer you will have to install it. This process is not especially difficult, and I will refer you to the APS resource if you want to do it [4].

REVTeX is available in Overleaf, along with a wide variety of templates for other journals. I'm showing you REVTeX because this is a physics class. To format an article in REVTeX, choose that template when you start your project, as shown in Figures 1 and 2, and then replace the stock content with your own.

4 Submission

Each journal has its own submission protocol, and if you are formatting on your own computer using a locally-installed distribution you will need to visit the journal's website for instructions. Overleaf has shortcuts to some journals, and if your chosen journal accepts submissions from Overleaf all you have to do is click on the Submit icon at the top-right of your browser window. A dialog

window will pop up to guide you through the process. Submission to the e-Print archives is supported, for example, which as I've said above should be the first thing you do after writing your paper.

Unfortunately none of the usual journals I typically submit to (the Physical Review journals, Physics Letters A, the American Journal of Physics, etc.) are listed, and if this is the case for you, you will have to go to that journal's website and submit your manuscript according to their procedure.

5 Exercises

There is nothing for you to turn in this week. Keep this information, and when you publish your first (or next) paper, use it to format and submit your work to your chosen journal.

References

- [1] <https://arxiv.org/>
- [2] <https://journals.aps.org/about>
- [3] <https://arxiv.org/help/faq/references>
- [4] <https://journals.aps.org/revtex>

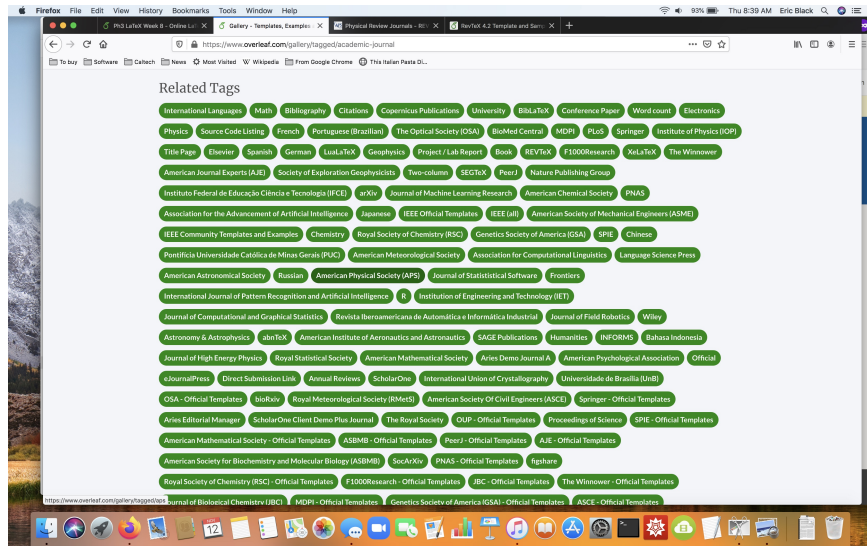


Figure 2: Scroll down in the Academic Journal Gallery, and click on the tag for the American Physical Society. This will bring up the REVTeX template, whose content you can then replace with your own.