

# An example of how to use this plugin.

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## Abstract

This is the abstract. The abstract needs only be placed under an header named “Abstract” in the longform note.

## 1 Introduction

Most of the introduction is in another note. We embed its contents without creating a latex environment. We *have* **things** “to” talk about. We can use latex macros:  $\text{aff}(T)$ . We can reference markdown headers, which become references to latex sections: feel free to skip ahead to Section 3.

Results are referenced by linking notes: we will show that Theorem 3.1 holds by using Lemma 3.2, Proposition 4.1, Lemma 3.3 and Lemma 1.1. We can state results through labelled embeds, as follows.

**Lemma 1.1.** *That the first lemma holds*

Note that the above result was embedded into the note ‘introduction’ which was itself embedded into the longform note, and this still produces a result that can be referenced from anywhere via wikilinks.

## 2 Literature review

We cite as follows: [3]. A *textcite* can be also used: the book is by Vershynin [3]. Specific results can be referenced: [3, Example 5.4]. Multi-citations are also supported: [1, 2].

Alternatively, pandoc syntax also works, though you may want to set the default citation command to *textcite* in the plugin settings. [3], [3], [3, Example 2.1], [1, 2], and then [3].

## 3 Main results

Here is an equation that we can reference.

$$1 + 1 = 2 \tag{1}$$

**Lemma 3.1.** *We reference the equation: Equation (1) and the result: Lemma 3.1.*

$$1 + 1 = 1 + 3 - 2 \tag{2}$$

$$= 2 \tag{3}$$

*We can reference individual lines of an align environment: Equation (2) and Equation (3).*

The next result is in its own note. Embedding the ‘Statement’ header as follows creates a latex environment.

**Theorem 3.1.** *Indeed,  $1 + 1 = 2$ .*

We can link to the proof with a wikilink to the “Proof” header. The theorem environment is then referenced as Theorem 3.1, or as Theorem 3.1. To show Theorem 3.1, we need the following two results.

**Lemma 3.2.** *The first fact is that  $10 - 9 = 1$*

We defer the proof to the appendix.

**Lemma 3.3.** *A first additional lemma*

$$1 + 1 = 2$$

We can use lists. Also, results can live in the same note under different headers. We embedded two results from the same note:

1. The first is Lemma 3.3.
2. The other, Lemma 1.1.

There are also options for comments.

## 4 Proofs

We are ready to prove our main result. We can embed proof environments from other notes. References to the correct results in the header of the proof are generated automatically.

*Proof of Theorem 3.1.* For this we require another result.

**Proposition 4.1.**  $1 + 4 = 5$

*Proof of Proposition 4.1.* Left to the reader. □

and therefore we can finish the proof of Theorem 3.1. □

### 4.1 Sub-section for proofs

There can be nested sections, which can be referenced via wikilinks from anywhere.

## 5 Numerics

Behold! Figures with captions are supported! The relevant files will be copied over with the export. We can reference the figures with a wikilink Figure 1.



Figure 1: Captions of figures are specified in the display part of the figure's embed wikilink.

## 6 Other features

External link: [google.com](https://www.google.com).

## References

- [1] Aaron Berk et al. “A Coherence Parameter Characterizing Generative Compressed Sensing with Fourier Measurements”. In: *IEEE Journal on Selected Areas in Information Theory* (2022), pp. 1–1. ISSN: 2641-8770. DOI: 10.1109/JSAIT.2022.3220196.
- [2] Aaron Berk et al. “Model-Adapted Fourier Sampling for Generative Compressed Sensing”. In: *NeurIPS 2023 Workshop on Deep Learning and Inverse Problems*. Nov. 2023. (Visited on 05/11/2024).
- [3] Roman Vershynin. *High-Dimensional Probability: An Introduction with Applications in Data Science*. Cambridge University Press, Sept. 2018. ISBN: 978-1-108-24454-1.

## A Appendix

*Proof of Lemma 3.2.* Ask chatgpt.

□