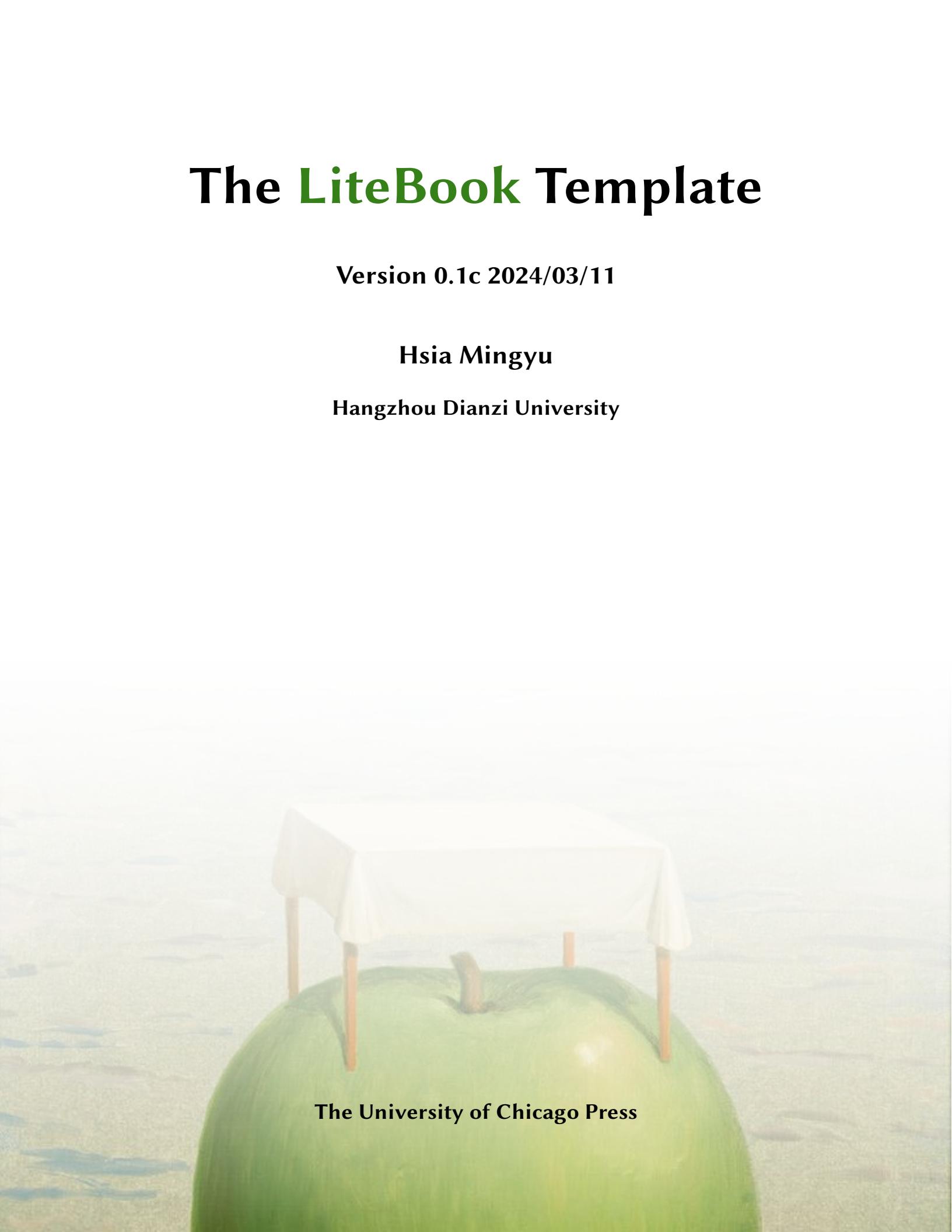


# The LiteBook Template

Version 0.1c 2024/03/11

Hsia Mingyu

Hangzhou Dianzi University

A close-up photograph of a bright green apple. Three small white flags with orange wooden stakes are stuck into the top of the apple, pointing upwards. The background is a soft-focus landscape of rolling hills under a clear sky.

The University of Chicago Press

# *The **LiteBook** Template*

# Contents

|          |  |          |
|----------|--|----------|
| <b>1</b> | <b>The LiteBook Template</b>                   | <b>1</b> |
| 1.1      | The purpose of this package . . . . .          | 1        |
| 1.2      | Installing LiteBook and loading it . . . . .   | 1        |
| 1.3      | Compatibility . . . . .                        | 1        |
| 1.4      | Cover Information Settings . . . . .           | 1        |
| 1.5      | Preset packages and commands . . . . .         | 2        |
| 1.6      | Preset Environments . . . . .                  | 2        |
| 1.7      | Equation Test . . . . .                        | 2        |
| 1.8      | Figure and Caption Side by Side Test . . . . . | 2        |
| <b>A</b> | <b>Test of Unnumbered Chapter</b>              | <b>3</b> |



## 1.1 The purpose of this package

This template provides a fresh cover and chapter design for book. Welcome to feedback bugs or ideas via email [xiamyphys@gmail.com](mailto:xiamyphys@gmail.com) or [GitHub](https://github.com/xiamyphys/LiteBook).

This template was originally used for the reformatting of the textbook *General Relativity, R. Wald*, you can download it from <https://github.com/xiamyphys/LaTeX-General-Relativity-R.Wald>.

## 1.2 Installing LiteBook and loading it

For portable version, simply download latest `litebook.cls` file from [GitHub](#) or [CTAN](#) and save it under your working directory. This way of installation is simple and convenient, but you have to manually update `.cls` now and then.

However, I strongly suggest that you should use terminal/cmd to implement the commands to update all the packages (and install this package) to the latest version or switch to portable version instead

```
sudo tlmgr update --self --all
```

If you are in some areas with awful Internet environment (such as a), you can choose proper mirror source or use other means<sup>1</sup>. To learn more, please refer to [How do I update my TeX distribution?](#)

## 1.3 Compatibility

The test environments are macOS + MacTeX 2024 / Overleaf and they all work fine for pdfTeX and XeTeX compilers, Windows, Linux and Unix platforms compatibility unknown.

## 1.4 Cover Information Settings

Just like the cover of this document, there are 5 lines of information on the cover and a cover image, the corresponding commands are

```
\title{The \pkg{LiteBook} Template}      \subtitle{Version 0.1b \today}
\press{The University of Chicago Press} \author{Hsia Mingyu}
\bioinfo{Hangzhou Dianzi University}   \cover{Beautiful-realities.jpeg}
```

Here, the same as the `book` class, the command `title` could not be omitted, or it will return an error, and there will be a warning if the command `author` is omitted.

---

<sup>1</sup>Please comply with local network regulations.

## 1.5 Preset packages and commands

This package has been preset with the following packages:

|            |         |           |          |          |            |              |
|------------|---------|-----------|----------|----------|------------|--------------|
| amsmath    | amssymb | mathrsfs  | esvect   | physics2 | fixdif     | bm           |
| derivative | cancel  | extarrows | siunitx  | nicefrac | nicematrix | booktabs     |
| tabularx   | diagbox | multicol  | multirow | refstyle | tcolorbox  | fontawesome5 |

You can click on them to go to the homepage to view the documentation.

And commands `\i`, `\e`, `\T` has been defined to input i, e in roman (non-italic) text and matrix transpose symbol T, which can help you typeset math quickly.

The template has been preset the following reference command via `refstyle` package: `\eqref{#1}`, `\figref{#1}` and `\tabref{#1}`, you can add other commands like these via `refstyle` package.

## 1.6 Preset Environments

The following environments have been preset, you can add other environments via the `amsthm` package.

**Definition 1.6.1.** A definition environment.

**Axiom 1.6.1.** An axiom environment.

**Theorem 1.6.1.** A theorem environment.

**Proposition 1.6.1.** A proposition environment.

**Lemma 1.6.1.** A lemma environment.

**Example.** An example environment.

**Corollary 1.6.1.** A corollary environment.

**Problem 1.** A problem environment.

**Postulate 1.6.1.** A postulate environment.

**Solution.** A solution environment.

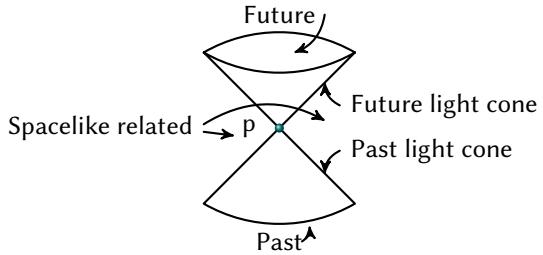
## 1.7 Equation Test

$$\left( \frac{1}{c^2} \frac{\partial^2}{\partial t^2} - \nabla^2 + \frac{mc^2}{\hbar^2} \right) \psi(\mathbf{x}, t) = 0 \quad (1.7.1)$$

The Klein-Gordon equation (1.7.1).

## 1.8 Figure and Caption Side by Side Test

**Figure 1.1.** A diagram showing the causal structure of spacetime in special relativity. The “light cone” of p rather than a “surface of simultaneity” with p now plays a fundamental role in determining the causal relationship of p to other events.



**Figure 1.1** shows the Light Cone.

# A Test of Unnumbered Chapter

  Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris. Nam arcu libero, nonummy eget, consectetuer id, vulputate a, magna. Donec vehicula augue eu neque. Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas. Mauris ut leo. Cras viverra metus rhoncus sem. Nulla et lectus vestibulum urna fringilla ultrices. Phasellus eu tellus sit amet tortor gravida placerat. Integer sapien est, iaculis in, pretium quis, viverra ac, nunc. Praesent eget sem vel leo ultrices bibendum. Aenean faucibus. Morbi dolor nulla, malesuada eu, pulvinar at, mollis ac, nulla. Curabitur auctor semper nulla. Donec varius orci eget risus. Duis nibh mi, congue eu, accumsan eleifend, sagittis quis, diam. Duis eget orci sit amet orci dignissim rutrum.

  Nam dui ligula, fringilla a, euismod sodales, sollicitudin vel, wisi. Morbi auctor lorem non justo. Nam lacus libero, pretium at, lobortis vitae, ultricies et, tellus. Donec aliquet, tortor sed accumsan bibendum, erat ligula aliquet magna, vitae ornare odio metus a mi. Morbi ac orci et nisl hendrerit mollis. Suspendisse ut massa. Cras nec ante. Pellentesque a nulla. Cum sociis natoque penatibus et magnis dis parturient montes, nascetur ridiculus mus. Aliquam tincidunt urna. Nulla ullamcorper vestibulum turpis. Pellentesque cursus luctus mauris.

  Nulla malesuada porttitor diam. Donec felis erat, congue non, volutpat at, tincidunt tristique, libero. Vivamus viverra fermentum felis. Donec nonummy pellentesque ante. Phasellus adipiscing semper elit. Proin fermentum massa ac quam. Sed diam turpis, molestie vitae, placerat a, molestie nec, leo. Maecenas lacinia. Nam ipsum ligula, eleifend at, accumsan nec, suscipit a, ipsum. Morbi blandit ligula feugiat magna. Nunc eleifend consequat lorem. Sed lacinia nulla vitae enim. Pellentesque tincidunt purus vel magna. Integer non enim. Praesent euismod nunc eu purus. Donec bibendum quam in tellus. Nullam cursus pulvinar lectus. Donec et mi. Nam vulputate metus eu enim. Vestibulum pellentesque felis eu massa.

  Quisque ullamcorper placerat ipsum. Cras nibh. Morbi vel justo vitae lacus tincidunt ultrices. Lorem ipsum dolor sit amet, consectetuer adipiscing elit. In hac habitasse platea dictumst. Integer tempus convallis augue. Etiam facilisis. Nunc elementum fermentum wisi. Aenean placerat. Ut imperdiet, enim sed gravida sollicitudin, felis odio placerat quam, ac pulvinar elit purus eget enim. Nunc vitae tortor. Proin tempus nibh sit amet nisl. Vivamus quis tortor vitae risus porta vehicula.

  Fusce mauris. Vestibulum luctus nibh at lectus. Sed bibendum, nulla a faucibus semper, leo velit ultricies tellus, ac venenatis arcu wisi vel nisl. Vestibulum diam. Aliquam pellentesque, augue quis sagittis posuere, turpis lacus congue quam, in hendrerit risus eros eget felis. Maecenas eget erat in sapien mattis porttitor. Vestibulum porttitor. Nulla facilisi. Sed a turpis eu lacus commodo facilisis. Morbi fringilla, wisi in dignissim interdum, justo lectus sagittis dui, et vehicula libero dui cursus dui. Mauris tempor ligula sed lacus. Duis cursus enim ut augue. Cras ac magna. Cras nulla. Nulla egestas. Curabitur a leo. Quisque egestas wisi eget nunc. Nam feugiat lacus vel est. Curabitur consectetur.

  Suspendisse vel felis. Ut lorem lorem, interdum eu, tincidunt sit amet, laoreet vitae, arcu. Aenean faucibus pede eu ante. Praesent enim elit, rutrum at, molestie non, nonummy vel, nisl. Ut lectus eros, malesuada sit amet, fermentum eu, sodales cursus, magna. Donec eu purus. Quisque vehicula, urna sed ultricies auctor, pede lorem egestas dui, et convallis elit erat sed nulla. Donec luctus. Curabitur et nunc. Aliquam dolor odio, commodo pretium, ultricies non, pharetra in, velit. Integer arcu est, nonummy in, fermentum faucibus, egestas vel, odio.