My document's title

Jane Doe

2021

Contents

List of Figures

List of Tables

1 Chapter Title

1.1 Section Title

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Fusce et erat eget mauris semper aliquam in non nulla. Quisque a velit semper, varius lacus at, egestas ante. Morbi aliquam viverra elit eu volutpat. Aliquam in rhoncus massa. Quisque euismod interdum urna in viverra. Morbi molestie euismod purus mattis ultricies. In quis lobortis massa, eu imperdiet dolor. Sed ultricies odio at dui varius, vitae bibendum sapien vestibulum. Duis accumsan, justo malesuada ullamcorper vestibulum, lorem metus fringilla quam, quis adipiscing purus quam non metus. Ut posuere tincidunt tellus, non volutpat mi sagittis eget. Sed nisi justo, placerat nec condimentum sed, malesuada id lectus. Proin at nibh elit.

1.1.1 Subsection A

Vestibulum ante ipsum primis in faucibus orci luctus et ultrices posuere cubilia Curae; Etiam in vulputate orci. Proin sit amet urna augue. Cras nisl arcu, ullamcorper sollicitudin dui a, imperdiet lobortis libero. Donec feugiat fringilla nulla, vitae egestas enim iaculis at. Nulla nec tincidunt justo. Donec condimentum dolor est, ut molestie urna luctus in.

1.1.2 Subsection B

I am part of Section 1.1.

Paragraph Lorem....

Subparagraph Lorem....

1.2 Equations

Default equation:

$$E = \frac{1}{2}nk_BT \tag{1.1}$$

Equation without numbering:

$$E = \frac{1}{2}nk_BT$$

Eqnarray:

$$
\begin{aligned}
E_{kin} &= E_{pot} & (1.2)\\
\Leftrightarrow \frac{1}{2}mv^2 &= \frac{GMm}{r} & (1.3)\\
\Leftrightarrow v &= \sqrt{2\frac{GM}{r}} := v_{escape} & (1.4)
\end{aligned}
$$

Align:

$$
\begin{aligned}
E_{kin} &= E_{pot} & (1.5)\\
\Leftrightarrow \frac{1}{2}mv^2 &= \frac{GMm}{r} & (1.6)\\
\Leftrightarrow v &= \sqrt{2\frac{GM}{r}} := v_{escape} & (1.7)
\end{aligned}
$$

1.3 Text Formatting

- This is **bold**.

- This is *italicized*.

- This is <u>underlined</u>.

- This is *emphasized*.

- This is `typewriter family`.

- This is Roman font family.

- This is sans serif font.

- $x = 10$, while $y = 7$

- $\mathbb{R}$, $\mathbf{R}$

1.3.1 Font Sizes

- tiny

- scriptsize

- footnotesize

- small

- normalsize

- large
- Large
- LARGE
- huge
- Huge

1.3.2 Font Color

This is my text in **red**. This is my color.

1.3.3 Text alignment

<div align="center">centered text</div>

left aligned text

o

<div align="right">right aligne text</div>

top text

bottom text left text

right text

This is some extra space.
This is some extra space.
This is some extra space.
This is some extra space.
This is some extra space.
This is some extra space.
This is some extra space.
This is some extra space.

1.3.4 Horizontal lines

1.4 Cross Referencing

$$E = \frac{1}{2}nk_BT \tag{1.8}$$

As you can see in Equation 1.8, ...
In Figure 1.1 ...
In Table 1.2 ...
In Section 1.1 ...

1.5 Lists

Unordered lists:

- entry 1

- entry 2

Unordered list with description:

keyword 1 : description text 1

keyword 2 : description text 2

Ordered lists:

1. entry 1

2. entry 2

Figure 1.1: Optional image caption.

Table 1.1: Optional table caption.

1st column	2nd column	
row 1	entry 1.1	entry 1.2
row 2	entry 2	

1.6 Images

1.7 Tables

1.8 Bibliography

We cite Gurnett et al. [2007]...and Leclercq et al. [2016]. As we shown [Gurnett et al., 2007], ...

Table 1.2: Optional table caption.

1st column	2nd column	3rd column
row 1	*entry 1*	number 1
entry 2		number 2
row 3	*entry 3*	number 3

Bibliography

D. A. Gurnett, a. M. Persoon, William S. Kurth, J. B. Groene, T. F. Averkamp, Michele K. Dougherty, and D. J. Southwood. The variable rotation period of the inner region of Saturn's plasma disk. *Science (New York, N.Y.)*, 316(5823): 442–5, April 2007. ISSN 1095-9203. doi: 10.1126/science.1138562. URL http://www.ncbi.nlm.nih.gov/pubmed/17379775.

L. Leclercq, R. Modolo, F. Leblanc, S. Hess, and M. Mancini. 3d magnetospheric parallel hybrid multi-grid method applied to planet–plasma interactions. *Journal of Computational Physics*, 309:295 – 313, 2016. ISSN 0021-9991. doi: https://doi.org/10.1016/j.jcp.2016.01.005. URL http://www.sciencedirect.com/science/article/pii/S0021999116000061.