TexEdBook

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Forward

This is *not* a full thesis template! It only demonstrates how to create per-chapter references using the `chapterbib` package with BibTeX. (Do not use with BibLaTeX!)

Each chapter must be in its own `.tex` file and `include`-d into the main `.tex` file. If compiling on your own machine, run `bibtex` on *each* generated `.aux` file, before running `pdflatex` twice more. (These are done automatically on Overleaf.)

Contents

1

Interactive Content

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1.1   Videos

Digital Content : Video

Calculus | This video by the Three Blue One Brown YouTube channel give a wonderful introduction to the core concepts of Calculus

Digital Content : Video

Complex Fermi Surfaces | This video by Prof. Jeff Snyder introduces complex Fermi surfaces in semi-conductors.

1.2   Coding

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```
import numpy as np
import matplotlib.pyplot as plt

x = np.linspace(0,2)
y1 = np.exp(x)
```

```
y2 = x + 1

plt.plot(x, y1, label=r"$y_1=e^x$")
plt.plot(x, y2, label=r"$y_2 = x + 1$")
plt.legend()
plt.xlim(0,1)
plt.ylim(0,3)
plt.xlabel('x')
plt.ylabel('y')

plt.show()
```

Digital Content : Python coding environment

Sample Trinket | This is a Python3 coding evironment powered by Trinket.

1.3 Live Math

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Digital Content : CalcHub Workspace

Sample CalcHub Workspace | At this link you can find and interactive workspace for working out live math problems.

Bibliography

2

Equations and Figures

2.1 Equations

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$$\kappa_{\mathrm{pg}} = \frac{1}{3} \int\limits_{0}^{\omega_{\mathrm{max}}} C(\omega)\, v_{\mathrm{g}}(\omega)^2\, \tau(\omega)\, d\omega. \tag{2.1}$$

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2.2 Figure

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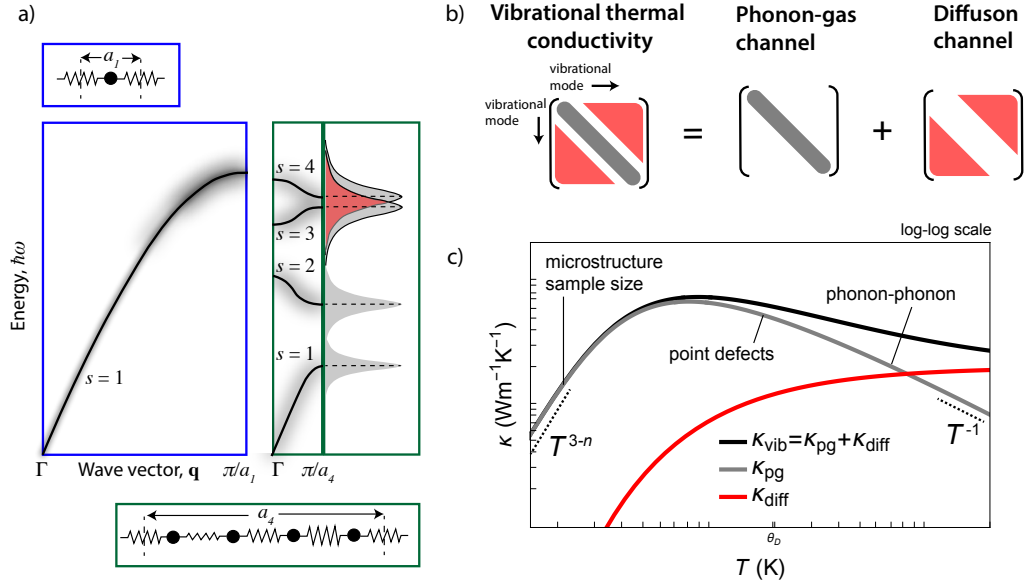
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Bibliography

[1] Frank Mittelbach, Michel Goossens, Johannes Braams, David Carlisle, and Chris Rowley. *The LaTeX Companion*. Addison-Wesley Series on Tools and Techniques for Computer Typesetting. Addison-Wesley, Boston, MA, USA, 2nd edition, 2004.

3

Lists and Tables

"This is a quote and I don't know who said this."

– Author's name, *Source of this quote*

3.1 Lists

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3.1.2 Bulleted list

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3.2 Tables

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Table 3.1: Sample table

S. No.	Column#1	Thermal conductivity, κ_{pg}	Column#3
1	50	837	970
2	47	877	230
3	31	25	415
4	35	144	2356
5	45	300	556

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Afterword

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