

Notes during my PhD

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This document is a ongoing book of my notes and thoughts during my PhD. Inspired by the Tufte-Handout Style ¹, this handout is built using `tufte-latex`.

¹ Inspired by Edward R. Tufte!

Mathematical Notation

It has always been a hassle to organise mathematical notation across different sources, in fact, lots of my peers argues that it is the most annoying things when one starts reading a book or a article.

However, there **MUST BE** some notational conflicts beyond primary school simply due to the fact that the limited number of alphetbets. For example, \mathbb{E} might be energy in physics while it could mean expectation or scores in the context of probability.

One reasons that I found it difficult is that the authors often assume some familirity in the topics **ALSO** readers should be reading in some logical or chronological sequences while in reality , I, am usually jumping between one literature to another.

Symbol	for ...	Meaning
\mathbb{R}		set of real numbers $(-\infty, \infty)$
\mathbb{R}		set of nonnegative real numbers $[0, \infty)$

References