PDRP Notes

Keshav Balwant Deoskar

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1 February 8 - First meeting

1.1 Game Plan

The plan is to cover the following topics in roughly descending order

• Susy and Morse Theory

• Witten TQFT's : Cohomology

• Schwarz : Path Integration

• Chern-Simons theory : Related to condensed matter theory

Some math we'll need for all of these Homology, Bundles, and Morse Theory. Stuff we want to review before the meat:

- QFT, particularly Canonical Quantization
- Path Integrals

2 Review of Topology

-Refer to Physics 198 notes lmao

Why is the definition of a topology useful?