

COURSE SUMMARY

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MATH B49
05/23/2022

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1. INTRODUCTION

TODO

2. FUNDAMENTALS OF SHIFT SPACES

- 2.1. **Coded Shifts.** [[1](#), 03/22]
- 2.2. **Topological Entropy in Shift Spaces.** [[1](#), 03/02]

3. COMPUTABILITY OF SHIFT SPACES

- 3.1. **Introduction to Computability.** [[1](#), 03/08, 03/15]
check notes on computability
- 3.2. **Computability of Sofic Shifts and SFTs.** [[1](#), 03/15]
check notes on computability
- 3.3. **Crash course in Measure Theory.** [[1](#), 03/08]
check notes on computability
- 3.4. **Crash Course in Ergodic Theory.** [[1](#), 04/19]

3.5. **Connecting Topological and Measure Theoretic Entropy.** [[1](#), 04/26, 04/19]

3.6. **Entropy of Coded Shifts.** [[1](#), 05/01]

REFERENCES

[1] Christian Wolf. *Symbolic Dynamics and Computability*. CUNY Topics Course. Spring 2023.