TEXTBOOK RECOMMENDATIONS

DORON GROSSMAN-NAPLES

ABSTRACT. This is a semi-comprehensive list of textbooks I recommend for various classes. The titles collected here are based on a number of criteria, including logical structure, narrative structure, clarity, elegance, and personal experience. This is all judged within the context of the state of the art for textbooks in each field. In addition to the names of the books, I include notes describing its pros, cons, and ideal use in my opinion.

CONTENTS

1. LINEAR ALGEBRA

Friedberg et al, *Linear Algebra.*

2. ABSTRACT ALGEBRA

Herstein, *Abstract Algebra.* (Not to be confused with his other book *Topics in Algebra.*)

3. GALOIS THEORY

Stewart, *Galois Theory.*

4. REAL ANALYSIS

Pugh, *Real Mathematical Analysis.* Abbot, *Understanding Analysis.*

5. POINT-SET TOPOLOGY

Munkres, *Topology.*

6. Algebraic Topology

Hatcher, *Algebraic Topology.* Milnor and Stasheff, *Characteristic Classes.*

7. Category Theory

Riehl, *Category Theory in Context.*

8. Commutative Algebra

Eisenbud, *Commutative Algebra with a View Towards Algebraic Geometry.*

9. Stable Homotopy Theory

Barnes and Roitzheim, *Foundations of Stable Homotopy Theory.* Lurie, *Higher Algebra.*

10. Model Categories

Dwyer and Spalinski, *Homotopy Theories and Model Categories.* Hovey, *Model Categories.*

11. Simplicial Homotopy Theory

Goerss and Jardine, *Simplicial Homotopy Theory.*

12. Higher Category Theory

Rezk, *Introduction to Quasicategories.* Lurie, *Higher Topos Theory.*