

1 Potential Presentation Topics

1. Knot theory
2. Topological data analysis
3. The Borsuk Ulam Theorem and applications (cake cutting, necklace splitting, etc)
4. Category theory
5. The Poincare Conjecture
6. Algebraic topology
7. Differential topology
8. Any chapter in Munkres beyond chapter 4
9. Infinite vector spaces, Banach spaces, and Hilbert spaces
10. Manifolds and classification of surfaces
11. Ultrafilters
12. Morse theory