Math 149: Second Problem Set

January 30, 2014

This should be completed by Tuesday, February 11. You will need to familiarize yourselves with Javaplex, available at comptop.stanford.edu.

- 1. Construct samples from the torus, Klein bottle, and projective plane, and run Javaplex to confirm that the barcodes are consistent with your earlier by hand calculations for these spaces
- 2. Sample from the sphere, and verify that Javaplex gives the expected result.