

Mathematics 2260H – Geometry I: Euclidean geometry

TRENT UNIVERSITY, Fall 2015

Assignment # π

The Relative Lightness of Listwolme

Due on Monday, 31 October, 2016.

This is an extra assignment which would give you a larger pool from which the best five are chosen to count towards the final mark. (Really, though, it's just for fun! :-) Find and read the story *The New Physics: The Speed of Lightness, Curved Space, and Other Heresies* by Charles Sheffield, and answer the questions below.

- e. Prove the spherical version of the Sharog-Paty Theorem, quoted in the story. You may use all the trigonometry you want to do so. [5]

Hint: It might help to read up on spherical geometry in Chapter 1 of the textbook.

- e². Give all the references you can find in *The New Physics* to actual persons, mathematical results, and physical theories, as well as historical events. (There are *lots* of these references, and not all them are to well-known things ...) [5]

NOTE: This is an extra assignment which would give you a larger pool from which the best five are chosen to count towards the final mark. Really, though, it's just to have something fun to do over Reading Week! :-)