

Homework 2

Algebraic Topology 2024-2025

Due 2 April, 2025

EXERCISE 1

Compute (if necessary, using a drawing) the fundamental groups of the following spaces:

- $X = \{(x, y, z) \in \mathbb{R}^3 \mid z(x^2 + y^2 + z^2 - 1) = 0\}$;
- The union of three copies of S^2 each tangent to the other two, as in

