Math F651: Homework 14 **Not Due**

1: Munkres 79.2.

2. The wedge of S^1 and S^2 (denoted by $S^1 \wedge S^2$) is defined as follows. Pick points p and q in S^1 and S^2 respectively. Then $S^1 \wedge S^2$ is the quotient space of $S^1 \cup S^2$ where p and q are identified. You can think of this as gluing S^1 and S^2 together at one point. Draw a picture of the universal cover of $S^1 \wedge S^2$.

3. Prove that there is no covering map from $\mathbb{T}^2$ to $\mathbb{RP}^2$.