

Math 527 - Homotopy Theory
Spring 2013
Homework 4, Lecture 2/8

Definition. A pointed space (X, x) is **well-pointed** if the inclusion of the basepoint $\{x\} \hookrightarrow X$ is a cofibration.

Problem 4. Let (X, x) be a well-pointed space. Show that the quotient map $SX \rightarrow \Sigma X$ from the unreduced suspension of X to the reduced suspension of X is a homotopy equivalence.