

# How to invert spheres and influence people

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## Abstract

Spheres of negative dimension sound like something only mathematicians could come up with; and that's why nobody will talk to us at parties. But that's OK, because we have stable homotopy theory to keep us entertained. In this talk, we will introduce some key ideas like categorification, stabilization, and spectra; and explain how formally inverting spheres leads us to the study of all possible cohomology theories and to a vast generalization of commutative algebra. Finally, we will discuss how to incorporate group actions into this, and some in-progress effort to understand more things about the group of order 2.

**Time:** 12 p.m, 1<sup>st</sup> June 2022

**Location:** B3.02

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