## **Topology** Seminar

## Tomer Schlank

of Hebrew University will be speaking on

## The Chromatic Nullstellensatz

on September 12 at 4:30 in MIT Room 2-131

Hilbert's Nullstellensatz is a fundamental result in commutative algebra which gives a defining property of algebraically closed fields. This property identifies algebraically closed fields as the "points" in classical algebraic geometry.

In this talk, I will discuss joint work with Robert Burklund and Allen Yuan in which we identify certain Lubin-Tate spectra as those that satisfy a chromatic version of Hilbert's Nullstellensatz. This will allow the definition of a "constructible" spectrum for  $E_{\infty}$  rings. I will then sample some applications of our results to chromatic redshift and orientation theory for  $E_{\infty}$  rings.