

# Topology Seminar

**Ethan Devinatz**

of University of Washington will be speaking on

## Higher homotopy commutativity of small ring spectra

on March 4 at 4:30 in  
MIT Room 2-131

Given a finite spectrum of type  $n$ , explicit  $v_n\text{self}$  —  
*maps are more easily constructed if that spectrum is*  
*sided unit but is not necessarily homotopy commuta*

Twenty five years ago I proved that if  $X$  is a finite ring  
spectrum of type  $n$ , then there exists a  $v_n\text{self}$  —  
*map  $f$  such that the cofiber  $X(f^i)$  of the  $\text{self}$  —*  
*map  $f^i$  is a ring spectrum for any  $i$ , and the pairing on  $X$*