

## ***TOPOLOGY SEMINAR***

**Guest Speaker: Allen Yuan**  
**Columbia University**

**Date:** Tuesday, November 30, 2021

**Time:** 2:30 PM

**Location:** Zoom

**Zoom Link:** <https://notredame.zoom.us/j/97262637721>



***Lecture Title:***

**Examples of chromatic redshift in algebraic K-theory**

***Abstract***

One form of the Ausoni-Rognes chromatic redshift philosophy is that algebraic K-theory raises the chromatic complexity of a ring by one. Work of Clausen-Mathew-Naumann-Noel shows, in particular, that K-theory raises height by at most one; on the other hand, recent work of Hahn-Wilson gives an example at each height (a form of  $BP\langle n \rangle$ ) where this height shifting does occur. In this talk, I will discuss a simple proof of this height shifting in a range of examples, including Lubin-Tate theories and the iterated K-theory of fields.