

## ***TOPOLOGY SEMINAR***

**Guest Speaker: Nathaniel Stapleton**  
**Regensburg**

**Date:** Thursday, December 1, 2016

**Time:** 11:00 AM

**Location:** 258 Hurley Hall



**Lecture Title:**

**The character of the total power operation**

**Abstract**

In the 90's Goerss, Hopkins, and Miller proved that the Morava E-theories are  $E_\infty$ -ring spectra in a unique way. Since then several people including Ando, Hopkins, Strickland, and Rezk have worked on explaining the affect of this structure on the homotopy groups of the spectrum. In this talk we will show how a form of character theory due to Hopkins, Kuhn, and Ravenel can be used to reduce this problem to a combination of combinatorics and the  $GL_n(\mathbb{Q}_p)$ -action on the Drinfeld ring of full level structures which shows up in the local Langlands correspondence.