1146-19-345 William Graham and Amber Russell* (acrusse3@butler.edu). Using Staggered Sheaves to Study K-Theory of Toric Varieties. Preliminary report.

Staggered sheaves were first defined by Achar as a generalization of the perverse coherent sheaves of Bezrukavnikov and Deligne. Treumann came behind him focusing on a way to define these objects for toric varieties. Then, in their joint work, Achar and Treumann defined a concept of purity for staggered sheaves similar to Deligne's for perverse sheaves. They used their purity results to give a basis in K-theory for smooth toric varieties which exhibits a particular positivity condition. William Graham and I spent time exploring the basis they give, and this talk will recall our findings. (Received January 26, 2019)