

1155-11-140

Theresa Anderson*, 150 N. University St., West Lafayette, IN 47907, and **Eyvindur Palsson**.

Sharp bounds for discrete bilinear spherical maximal functions.

Spherical maximal functions are classical objects of study in harmonic analysis. Discrete variants bring in number theory and satisfy (sometimes strikingly) different bounds than their continuous counterparts. After much investigation, sharp bounds were shown for the continuous bilinear spherical maximal function in recent work of Jeong and Lee. Surprisingly, a modification of their continuous techniques with some number theory leads to the (different) sharp bounds in the discrete setting. We discuss the (short!) proof and mention some related work. This is joint work with Eyvindur Palsson. (Received January 08, 2020)