Ben Krause and Joris Roos* (jroos.math@gmail.com). Discrete analogues of maximally modulated singular integrals of Stein-Wainger type.

Stein and Wainger introduced an interesting class of maximal oscillatory integral operators related to Carleson's theorem. The talk will be about joint work with Ben Krause on ℓ^p bounds for discrete analogues of some of these operators. These discrete analogues feature a number of substantial difficulties that are absent in the real-variable setting and involve themes from number theory and analysis. (Received August 24, 2021)