## ERIC SAWYER, McMaster University

Trilinear characterizations of the Fourier extension conjecture on the paraboloid in three dimensions

This is joint work with Cristian Rios. We first prove that a local trilinear extension inequality on the paraboloid in three dimensions is equivalent to the Fourier restriction conjecture in three dimensions. Then we prove the equivalence of the above trilinear Fourier extension conjecture with the special case of testing a local trilinear inequality over certain smooth Alpert pseudoprojections, representing the weakest such inequality equivalent to the Fourier extension conjecture that the authors could find.