

# AN IMPROVEMENT ON THE THREE-DIMENSIONAL RESTRICTION PROBLEM

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In this talk, I will discuss a recent improvement of Stein's restriction conjecture, based on the joint work with Hong Wang. Our proof is built upon the framework of polynomial partitioning, and, among other things, it uses the refined decoupling theorem, a two-ends Kakeya estimate. The bound we obtained so far does not seem to be the limit of our method. If time permits, I will discuss some ideas that may lead to a new improvement.