1019-42-64 Xiaochun Li* (xcli@math.uiuc.edu), Department of Math, UIUC, Urbana, IL 61801.

Multilinear oscillatory integrals.

We pose some basic questions concerning nonsingular multilinear operators with oscillatory factors, and give some partial answer to the questions. L^p estimates are established for multilinear integral operators of Calderon-Zygmund type which incorporate polynomial phases. This is a joint work with M. Christ, T. Tao, and C. Thiele. (Received August 05, 2006)