

Abstract

This manuscript provides an overview of known results in the theory of singular integral operators and multilinear multipliers as well as new results in this context. The first such result we describe is boundedness of rough maximal bilinear singular integrals on L_p spaces which is a part of the first attached paper. The same problem is discussed for a special kind of bilinear operator consisting of smooth bumps, this result is a part of the attached paper number two. Finally we attack the multilinear case of the same type of operator and present a result which is a part of an upcoming paper.