Dachun Yang
Beijing Normal University, People's Republic of China

Ball Average Characterizations of Function Spaces

It is well known that function spaces play an important role in the study on various problems from analysis. In this talk, we present pointwise and ball average characterizations of function spaces including Sobolev spaces, Besov spaces and Triebel-Lizorkin spaces on the Euclidean spaces. These characterizations have the advantages so that they can be used as the definitions of these function spaces on metric measure spaces. Some open questions are also presented in this talk.