MORREY SPACES ARE CLOSELY EMBEDDED BETW EEN VANISHING STUMMEL SPACES

STEFAN SAMKO

Abstract. We prove a new property of Morrey function spaces by showing that the generalized local Morrey spaces are embedded between weighted Lebesgue spaces with weights differing only by a logarithmic factor. This leads to the statement that the generalized global Morrey spaces are embedded between two generalized Stummel classes whose characteristics similarly differ by a logarithmic factor. We give examples proving that these embeddings are strict. For the generalized Stummel spaces we also give an equivalent norm.


Keywords and phrases: function space, local Morrey space, global Morrey space, generalized Morrey space, weighted space, Stummel class.

REFERENCES


