

On the regularity of characteristic functions

Winfried Sickel

Freiligrathstraße 4a, D-07743 Jena, Germany

Abstract

Let $E \subset \mathbb{R}$ be a domain such that $0 < |E| < \infty$. In my talk I will discuss the regularity of the associated characteristic function in the framework of Besov spaces. The main goal will be a description of *if and only if* - conditions given in terms of the volume of the δ neighborhoods of the boundary of E for a certain class of domains.