

In this thesis we introduce the concept of Wiener–Luxemburg amalgam spaces which are a modification of the more classical Wiener amalgam spaces intended to address some of the shortcomings the latter face in the context of rearrangement invariant Banach function spaces.

We first provide some new results concerning quasinormed spaces. Then we illustrate the asserted shortcomings of Wiener amalgam spaces by providing counterexamples to certain properties of Banach function spaces as well as rearrangement invariance. We introduce the Wiener–Luxemburg amalgam spaces and study their properties, including (but not limited to) their normability, embeddings between them and their associate spaces. Finally we provide some applications of this general theory.