Notes about Loukas Grafakos' Classical Fourier Analysis

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March 10, 2020

Abstract

This is a learning note about Chapter 1 of Grafako's *Classical Fourier Analysis*.

Contents

1 L^p Spaces and Interpolation

1.1 L^p and Weak L^p

Definition 1. *For f a measurable function on X, the distribution function of f is the function d_f defined on $[0,\infty)$ as follows:*

$$d_f(\alpha) = \mu\left(\{x \in X : |f(x)| > \alpha\}\right).$$