Hardy Inequalities on the Real Line

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Abstract. We prove that some inequalities, which are considered to be generalizations of Hardy’s inequality on the circle, can be modified and proved to be true for functions integrable on the real line. In fact we would like to show that some constructions that were used to prove the Littlewood conjecture can be used similarly to produce real Hardy-type inequalities. This discussion will lead to many questions concerning the relationship between Hardy-type inequalities on the circle and those on the real line.

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