Improved Hardy Inequalities

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We rewrite the standard Hardy inequality in the form of an equality with radial derivative in $\mathbb{R}^n$ for $n \geq 3$. Then we present another Hardy inequalities with radial and spherical derivatives in $\mathbb{R}^n$ for $n \geq 2$. We also discuss those optimality and nonexistence of nontrivial extremizers.

References

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