## TWO TRIGONOMETRIC INTEGRAL INEQUALITIES

## YI ZHAO

*Abstract.* The present paper establishes some important trigonometric integral inequalities related to functions of mean value bounded variation in real sense.

*Mathematics subject classification* (2010): 42A05, 42A38. *Keywords and phrases*: Sine integral, trigonometric integral inequality, mean value bounded variation.

## REFERENCES

- L. FENG, V. TOTIK AND S. P. ZHOU, Trigonometric series with a generalized monotonicity condition, Acta. Math. Sinica, English Ser., 30, 8 (2014), 1289–1296.
- [2] L. FENG AND S. P. ZHOU, Trigonometric inequalities in the MVBV condition, Math. Ineq. Appl., accepted.
- [3] L. LEINDLER, On the uniform convergence and boundedness of a certain class of sine series, Anal. Math., 27, (2001), 279–285.
- [4] S. A. TELYAKOVSKII, On partial sums of Fourier series of functions of bounded variation, Proc. Steklov. Inst. Math., 219, (1997), 372–381.
- [5] M. Z. WANG AND Y. ZHAO, Generalization of some classical results under MVBV condition, Math. Ineq. Appl., 12, (2009), 433–440.
- [6] Y. ZHAO, L. FENG AND S. P. ZHOU, The uniform convergence of sine integrals, to appear.
- [7] S. P. ZHOU, An important application of mean value bounded variation concept in weighted integrability, to appear.
- [8] S. P. ZHOU, Monotonicity Condition of Trigonometric Series: Development and Application, Science Press, Beijing, 2012, in Chinese.
- [9] S. P. ZHOU, P. ZHOU AND D. S. YU, Ultimate generalization to monotonicity for uniform convergence of trigonometric series, Science China Math., 53, (2010), 1853–1862, available: arXiv: math.CA/0611805 v127 Nov 2006.

