

**Remark on the boundedness of the Cauchy
singular integral operator on variable
Lebesgue spaces with radial oscillating weights**

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To Professor Kokilashvili on his seventieth birthday

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Abstract. Recently V. Kokilashvili, N. Samko, and S. Samko have proved a sufficient condition for the boundedness of the Cauchy singular integral operator on variable Lebesgue spaces with radial oscillating weights over Carleson curves. This condition is formulated in terms of Matuszewska-Orlicz indices of weights. We prove a partial converse of their result.

1. Introduction and main result

Let Γ be a rectifiable curve in the complex plane. We equip Γ with Lebesgue length measure $|d\tau|$. We say that a curve Γ is simple if it does not have self-intersections. In other words, Γ is said to be simple if it is homeomorphic either to a line segment or to a circle. In the latter

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