Criteria for the C-integral

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ABSTRACT. The C-integral was introduced by Bongiorno as a minimal constructive integration process of Riemann type which contains the Lebesgue integral and the Newton integral. Moreover Bongiorno, Piazza and Preiss gave some criteria for the C-integral. On the other hand, Nakanishi gave some criteria for the restricted Denjoy integral. In this paper we will give new criteria for the C-integral in the style of Nakanishi.

Key words and phrases. C-integral, Denjoy integral, Lebesgue integral, Newton integral.