



## RESULTS ON TRANSCENDENTAL MEROMORPHIC FUNCTIONS CONCERNING $\mathbb{C}$ -SHIFT DIFFERENCE OPERATOR WITH $k^{TH}$ DERIVATIVE

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**Abstract.** In this literature survey, we study the  $n^{th}$  exact difference of the logarithmic derivative lemma and second main theorems for meromorphic functions respectively, we here mainly study the uniqueness problems for transcendental meromorphic functions concerning  $\mathbb{C}$ -shift difference operator with  $k^{th}$  derivative. Also our results extends and improved some results due to Wangning Wu, Tingbin Cao.

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