TWO SEQUENCES OF OPERATOR MONOTONE
FUNCTIONS UNDER STRICTLY CHAOTIC ORDER

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Abstract. Based on the well-known operator monotone function \( \log t \) the chaotic order was defined by \( A \gg B \), e.g. \( \log A \gg \log B \), and thereby the operator monotonicity of functions under strictly chaotic order has been introduced. However, until now the revealed operator functions with such property have been less than those functions under usual order. In this study, we investigate two sequences of operator monotone functions under strictly chaotic order, following the trace of Professor T. Furuta, S. Izumino and so on. However, the method is different from that of the relative results on

\[
f_0(t) = \frac{t-1}{\log t}, f_p(t) = \frac{t - pf_{p-1}(t)}{\log t}, \quad p = 1, 2, \ldots
\]
due to S. Izumino and N. Nakamura.


Keywords and phrases: operator monotone function, positive operator, strictly chaotic order.

REFERENCES