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# Hyper Semi-deterministic Pushdown Automata (HSDPDA) of Order “ $n$ ”

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**Abstract.** Hyper  $\beta$ -languages of order  $n$  have been already introduced by the authors of [12]. In this paper, we formulate the notion of hyper semi-deterministic pushdown automata (HSDPDA) of order  $n$  and show that for any given hyper  $\beta$ -language  $L$  of order  $n$ , there exists an HSDPDA of order  $n$  that accepts  $L$ .

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**Keywords:** Hyper  $\beta$ -language of order  $n$ , context-free language, pushdown automata

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