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Construction of hyper β -language from hyper semi-deterministic pushdown automata (HSDPDA) of order n

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Abstract. In [12], the authors formulated the concept of hyper β -languages of order n ($n \geq 1$) as a generalization of β -language of order n . Also, in [13], the authors introduced the notion of hyper semi-deterministic pushdown automata (HSDPDA) of order n ($n \geq 1$) and have shown that for every hyper β -languages of order n , there exists an HSDPDA of the same order that accepts that language. In this paper, we give an algorithmic method for constructing an equivalent hyper β -language from the language of an HSDPDA of order n .

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Keywords: β -language, hyper β -language, hyper semi-deterministic pushdown automata (HSDPDA), context-free grammar

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