

# On the New Relation of Second Order Limit Language and Other Different Types of Splicing System

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## Abstract:

Mathematical modelling of splicing system was introduced to initiate a linkage between the study of informational macromolecules that includes DNA and formal language theory. The ability to present the nitrogenous base which is a component in a nucleotide of DNA, as a series of alphabet, ignites this interdisciplinary study. Over the years, researchers have developed models to match their need. In addition, product of splicing system is called splicing language. Through some development, second order limit language is derived from other type of languages known as limit language. Its existence and characteristics have been vastly discussed. Beside, some types of splicing system can produce second order limit language. In this paper, the characteristics of different types of splicing system are studied and their relations with second order limit language are established

**Keywords:** Macromolecules; Nucleotide; Splicing System

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