

## FMfl2023 Program

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Title	<b>DNA Splicing : Emerging Technologies in Recombinant DNA Using Formal Language Theory</b>
Abstract	<p>The diversity of mathematical applications in various scientific concepts has led to significant advancements in understanding complex biological processes. One area where this interdisciplinary collaboration thrives is DNA splicing, a basic biological process in manipulating genetic information and simulated by the technique of recombinant DNA molecules that relies on restriction enzymes. This presentation explores the idea of DNA splicing in various concepts. Firstly, the fundamental mathematical framework behind DNA splicing is presented. Also, the interplay between mathematical models and wet lab experiments is shared to validate the theoretical findings. The emergence of DNA splicing in computer science where some computational models such as graphical user interface (GUI) is also discussed. Finally, the graphical approach to studying DNA splicing is presented to emphasize the role of visual representation in comprehending complex biological processes.</p>