Contribution ID: 12 Type: not specified

Al assist IBP reduction

Thursday, 27 February 2025 15:30 (30 minutes)

In high-energy physics, calculating Feynman integrals efficiently remains challenging due to the computational demands of traditional methods. We are developing a new approach relying on code generation capabilities of large language models to optimize integration-by-parts (IBP) reduction by combining advanced techniques with classical algorithms. This method shows significant improvements in efficiency and scalability, with reduced memory usage compared to conventional techniques.

Primary author: SONG, Zhuo-Yang (Peking University)

Presenter: SONG, Zhuo-Yang (Peking University)

Session Classification: Afternoon Talks