



Contribution ID: 155

Type: 20 minutes talk

Precision Calculation in Theoretical Predictions

Friday, 17 December 2021 10:15 (30 minutes)

The precision-improved theoretical prediction plays a crucial role in matching with the experiment result and test new physics. Our project is currently computing the 3-loop QCD correction to neutral kaon oscillation $\bar{s}d \rightarrow s\bar{d}$ amplitude, which helps with testing the CP violation about in kaon decays. The process and some techniques (e.g. tetrahedron symmetries) are applied for dealing with huge number ($\sim 10^4$) of 3-loop diagrams. Some future plan about precision in $g - 2$ is also presented in the end.

Could you please give the most relevant category for your talk?

Amplitudes

Will you be pre-recording your talk?

No

Are you happy for your talk to be recorded?

Yes

Would you be interested in receiving feedback on your presentation?

Yes

Primary author: Mr YU, Hang (University of Liverpool-Theoretical Physics)

Presenter: Mr YU, Hang (University of Liverpool-Theoretical Physics)

Session Classification: Full-length talks