



Contribution ID: 29

Type: **contributed parallel talk**

The new Belle II charm-flavor tagger

Thursday, July 20, 2023 4:30 PM (20 minutes)

Charm physics, involving a heavy up-type quark, offers a pathway to search for new particles and couplings beyond the Standard Model complementary to that of B physics. Measurements of CP violation and mixing play a key role in this program. We present a novel algorithm that identifies the flavor of neutral charm mesons at the time of production. This algorithm effectively doubles the sample size for many measurements of CP violation and flavor mixing at Belle II, which in the past have relied on charm mesons originating from D^* decays.

Consent

I consent to recording/broadcasting my presentation.

Primary author: Dr STARIC, Marko (Joseph Stephan Institute, Slovenia)

Co-author: VAHSEN, Sven (University of Hawaii)

Presenter: Dr STARIC, Marko (Joseph Stephan Institute, Slovenia)

Session Classification: Parallel B

Track Classification: facilities