

## Measurement of the tau EDM at Belle

*Tuesday 28 September 2021 08:50 (25 minutes)*

We have measured the electric dipole moment (EDM) of the tau lepton using an  $833 \text{ fb}^{-1}$  data sample collected with the Belle detector at the KEKB asymmetric-energy  $e^+e^-$  collider. Using an optimal observable method, we obtain the EDM result with  $O(10^{-17})$  ecm uncertainty. The result is consistent with no EDM at the present level of experimental sensitivity and improves the sensitivity by about a factor of three compared with the previous result.

### What is your topic?

**Authors:** INAMI, Kenji (Nagoya university); INAMI, Kenji (Nagoya university)

**Presenter:** INAMI, Kenji (Nagoya university)

**Session Classification:** Session 2b: Test of fundamental symmetries with tau lepton

**Track Classification:** Tau2021 Abstracts