



Contribution ID: 87

Type: Talk

## Recent results from Belle and Belle II

Wednesday 4 September 2024 14:00 (25 minutes)

The Belle II experiment has collected  $424 \text{ fb}^{-1}$  sample of  $e^+e^-$  collisions produced by the asymmetric SuperKEKB collider, at a centre-of-mass energy equal to or near the mass of the  $\Upsilon(4S)$  resonance. Ninety-percent of the sample is at the  $\Upsilon(4S)$  resonance, which decays to  $B$ -meson pairs. The predecessor experiment, Belle, collected nearly  $1 \text{ ab}^{-1}$  of data from 1999-2010, three-quarters of which was at the  $\Upsilon(4S)$ . From these  $\Upsilon(4S)$  data, we have made measurements of rare  $B$  decays and  $CP$  violation, as well as searched for lepton-universality violation. Highlights include the first observation of  $B \rightarrow K\nu\bar{\nu}$  and measurements of lepton-universality in semitauonic  $B$  decays. In addition, we study charm hadron decays, tau decays and quarkonium, which are also produced in abundance at these energies. Using low multiplicity events, we search for dark sector particles and make measurements related to the anomalous magnetic moment of the muon.

### Internet talk

No

### Is this an abstract from experimental collaboration?

Yes

### Name of experiment and experimental site

Belle II- KEK

### Is the speaker for that presentation defined?

Yes

### Details

Cristina Martellini - PostDoctoral Researcher , INFN-Roma Tre, Rome (Italy), <http://www.roma3.infn.it>

**Primary author:** MARTELLINI, Cristina (INFN-Roma Tre)

**Presenter:** MARTELLINI, Cristina (INFN-Roma Tre)

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