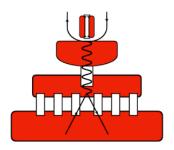
## **International Conference on Kaon Physics 2019**



Contribution ID: 12 Type: Talk

## Flavour Physics and CP Violation at KLOE-2

Tuesday 10 September 2019 16:50 (25 minutes)

The KLOE-2 experiment at the upgraded e+e- DAPHNE collider of the INFN Laboratori Nazionali di Frascati completed its data taking campaign at the end of Mach 2018, collecting more than 5 fb<sup>-1</sup> at the center of mass energy of the phi-meson. Together with the data set of its predecessor KLOE, the acquired data sample of 8 fb<sup>-1</sup> corresponds to  $2.4\times10^{10}~\phi$ -meson produced: the largest sample ever collected at the  $\phi(1020)$  at e<sup>+</sup>e<sup>-</sup> colliders.

KLOE-2 Collaboration activities are now focused on data reconstruction and analysis, continuing the KLOE long-standing tradition of flavour physics precision measurements in the kaon sector, to probe CKM unitarity and lepton universality, and search for Physics Beyond the Standard Model. Latest results on  $K_S$  rare decays will be presented and discussed in the framework of Flavour Physics and CP Violation tests, among these the measurement of Ks semileptonic branching ratios, using 1.7 fb<sup>-1</sup> KLOE data, and the search for the pure CP-violating  $K_S \to 3\pi^0$  decay with the newly acquired KLOE-2 data set.

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Session Classification: CPT conservation, CP and T violations