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Prospects in flavour physics at the FCC

The sample of 6×10^{12} Z decays that will be produced by FCC-ee offers immense opportunities for flavour physics. The low background environment, and high acceptance and reconstruction efficiencies of the detectors will allow this dataset to be fully exploited for a wide range of studies in the beauty, charm and tau sectors. In many cases, it is expected that these measurements will be world-leading in precision, and thereby be powerful in probing for the effects of New Physics. Interesting possibilities also exist for the measurement of the magnitude of CKM elements from W-boson and top decays. Discussion and numerical estimates are provided for the prospects of FCC-ee in a set of benchmark measurements, as requested by the Physics Preparatory Group of the European Strategy for Particle Physics Update 2025-26. Additional discussion is included on some other studies of interest. Finally, brief consideration is given to the prospects for flavour-physics studies at FCC-hh.

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