FUTURE CIRCULAR COLLIDER

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Jet-Flavour Tagging at Future e+e- Colliders

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One of the main objectives of FCCee is the precise measurements of Standard Model parameters, like the couplings of the Higgs boson to the bottom and charm quarks and gluons. This requires an efficient reconstruction and identification of the hadronic final states of these processes, which entails identifying the flavour of the parton that initiated the jet, referred to as jet-flavour tagging. Efficient and accurate jet-flavour identification is also necessary to assess the feasibility of measurements such as $Z \to s\bar{s}$ or $H \to s\bar{s}$ and therefore is essential to utilise the maximal physics potential of future collider experiments.

This talk presents the ongoing efforts on jet-flavour tagging at FCCee and other future colliders. It discusses a few tagging algorithms based on different neural network architectures.

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