

## Novel $b$ -hemisphere jet charge tagger at FCC-ee

*Wednesday, October 11, 2023 4:52 PM (16 minutes)*

The talk presents the feasibility of a novel  $b$ -hemisphere tagger and its application at the Tera- $Z$  programme at FCC-ee for the measurement of the partial width  $R_b$  and the  $b$ -quark forward-backward asymmetry  $A_{\text{FB}}^b$ . By exclusively reconstructing  $b$ -hadrons in the hemispheres, the major source of systematic uncertainties originating from light- and  $c$ -physics is eliminated. A discussion of the only remaining uncertainties is given and their impact on the measurement is estimated.

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