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FCC-ee EPOL The center-of-mass energy calibration and polarization working group

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The recent measurement of the W mass by the CDF collaboration at the Tevatron in hadron collisions has created a significant buzz in the community. Quite apart from the fact that it disagrees significantly both with the Standard Model predictions and with previous measurements of this quantity, this result is remarkable by two aspects:

1. the systematic error is of the same size as the statistical error (both better than 10^{-4})
2. the measurement relies entirely on the momentum scale calibration based on the J/psi, Upsilon, and Z masses, all measured in e+e- colliders with precision beam energy measurements performed by resonant depolarization.

This poster will describe the work of the working group on centre-of-mass energy calibration at the Z and W pair threshold, with precision targets of a few keV, several orders of magnitude smaller than those achieved at LEP.

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