

Abstract Submitted
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Improvements in tau identification and energy scale calibration at DZero ROMAIN MADAR, CEA, Irfu, SPP, Saclay, DZERO COLLABORATION — Many high energy physics processes whether from standard model origin or beyond include a τ lepton in their signatures. τ lepton signatures can then be of particular importance in many physics analyses such as top quark related measurements as well as Higgs boson or supersymmetry searches. τ leptons decay inside the detector ($c\tau = 87.1\mu\text{m}$), hence they are identified by their decay products: electrons, muons and hadrons. Different physical objects have similar experimental signatures and need to be discriminated from real tau decay. We present the current status and the future plans of τ reconstruction at the DZero experiment from the identification (using multivariate methods) to the τ energy scale calibration.

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