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A Primary Energy Reconstruction Method for Air Shower Array Experiments SAMVEL TER-ANTONYAN, ALI FAZELY, Southern University — A multi-parameter event-by-event primary energy reconstruction method is presented for the air shower array experiments such as IceTop. Results are obtained using CORSIKA EAS simulations taking into account the detector response and shower reconstruction uncertainties. Energy reconstruction for the primary nuclei within 10 - 12% in the energy region of E > 10 PeV are achievable, regardless of nucleus type.

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