

Exclusive reconstruction of semi-leptonic D0 decays

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Reconstruction methods using combined kinematic and geometric constraints are useful in recovering semi-leptonic decay channels, where otherwise - due to the missing neutrino, the physically useful kinematic information would be lost. We use the “Sliding Vertex” method, applied to the $D^0 \rightarrow K^- l^+ \nu_l$ channels. The M_{ν_l} invariant mass is studied in view of the attainable resolution, as this contains physics information of interest on heavy quark (non-relativistic) dynamics.

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