Semi-leptonic Study with New Samples

Y. Okugawa[1] A. Irles[2] R. Yonamine[1] F. Richard[2] R. Pöschl[2]

[1]Tohoku University

[2]Laboratoire de l'Accélérateur Linéaire

January 30, 2019

Table of Contents

Table of Contents

Lepton Polar Angle

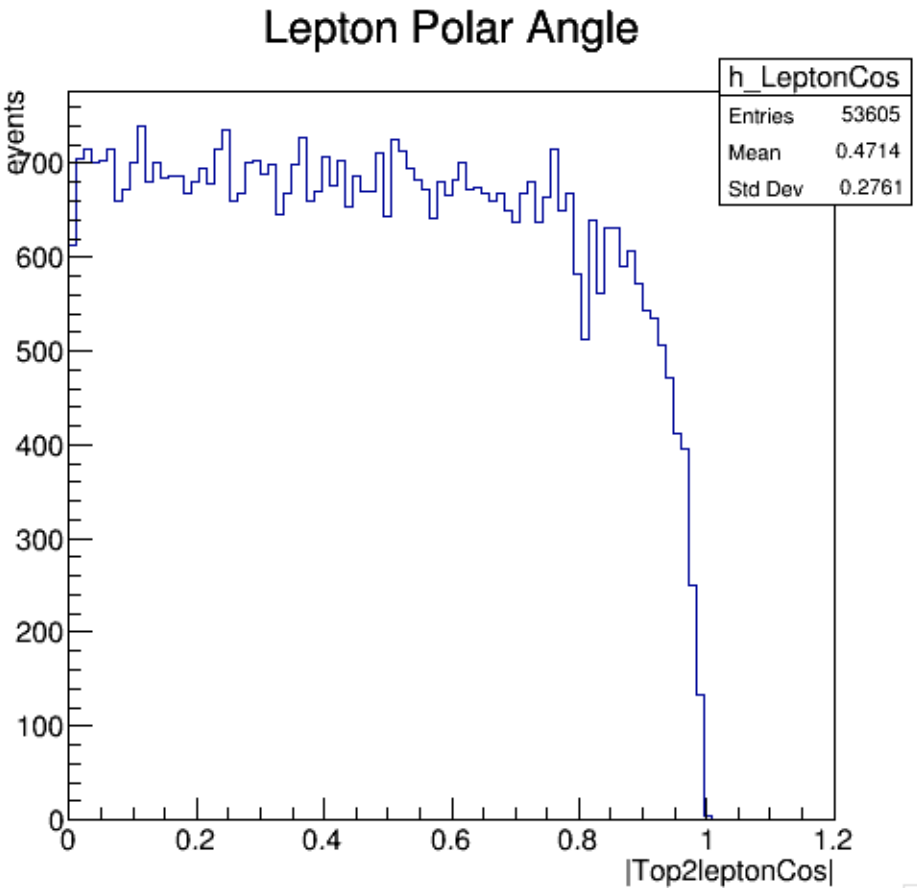

Figure: Lepton polar angle using LAL lepton finder

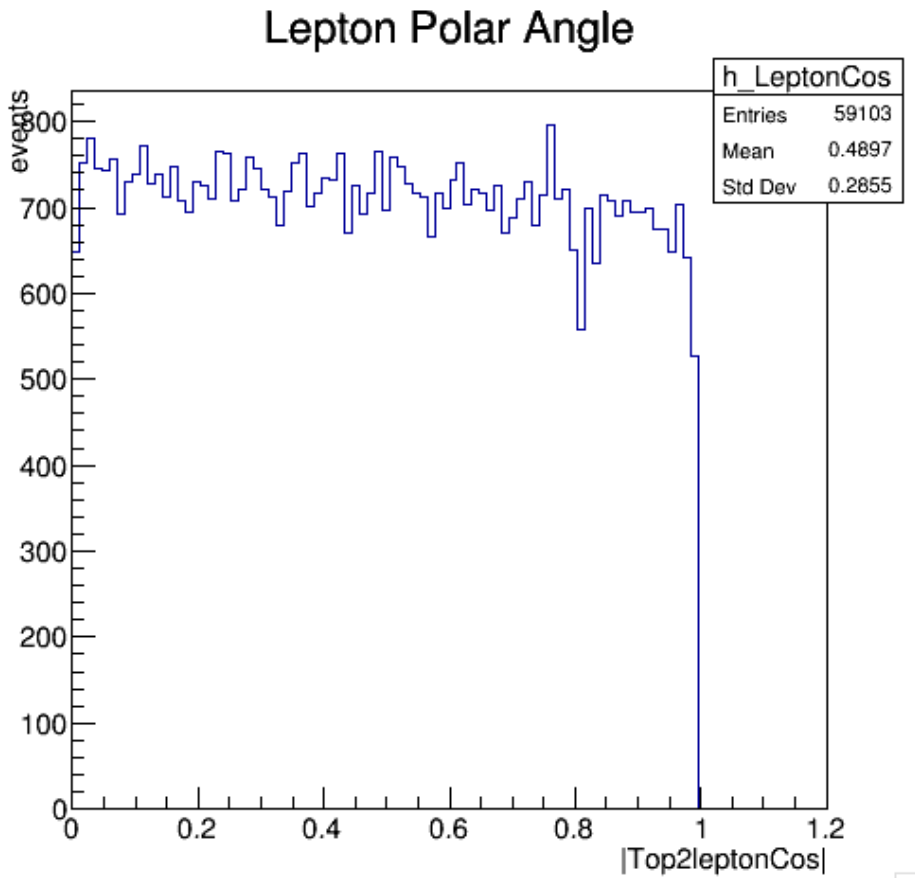

Figure: Lepton polar angle using Isolated Lepton Tagger in MarlinReco

B charge purity

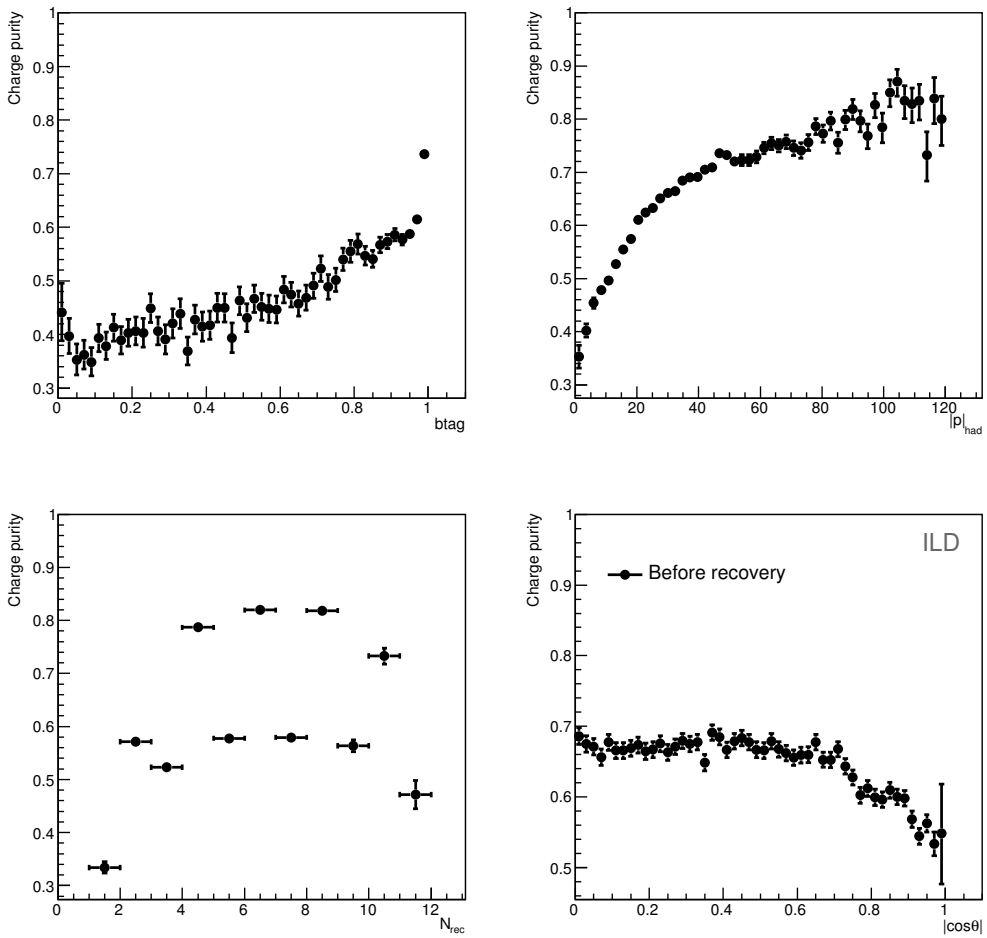

Figure: Purity of b charge as function of the jet b-tag, reconstructed b-hadron momentum, N_{rec} and the polar angle.

Number of Tracks

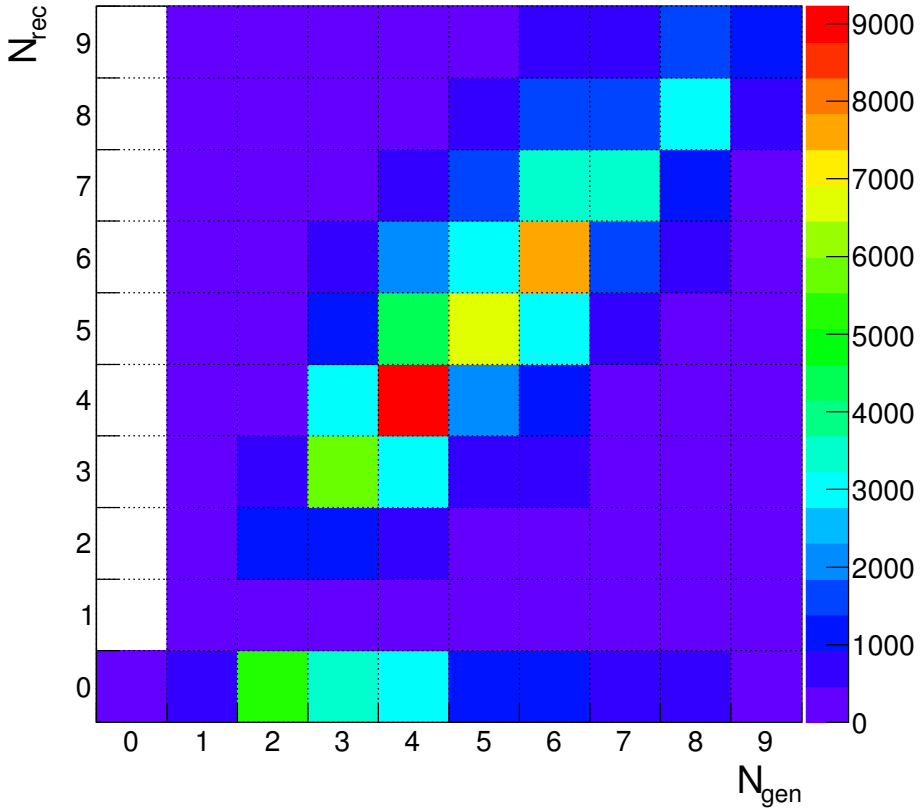

Figure: Number of tracks associated to a single vertex

Total vertices	93147
Total good vertices	43880
Lost track entries	44266

Table of Contents

Conclusion

Some important remarks:

- ☑ Implementation of Isolated Lepton Tagger instead of LAL Lepton Finder along with ILCSoft v02-00-02.
- ☐ Application of Vertex Recovery on IDR sample.

Adrian will follow up on discussion on comparison of application for Vertex Restorer with DBD and IDR samples.

References

Sviatoslav Bilokin (2017)

'Hadronic showers in a highly granular silicon-tungsten calorimeter and production of bottom and top quarks at the ILC'

Ph.D thesis, Université Paris Saclay, Orsay France

Thank you

Backup

dEdx information

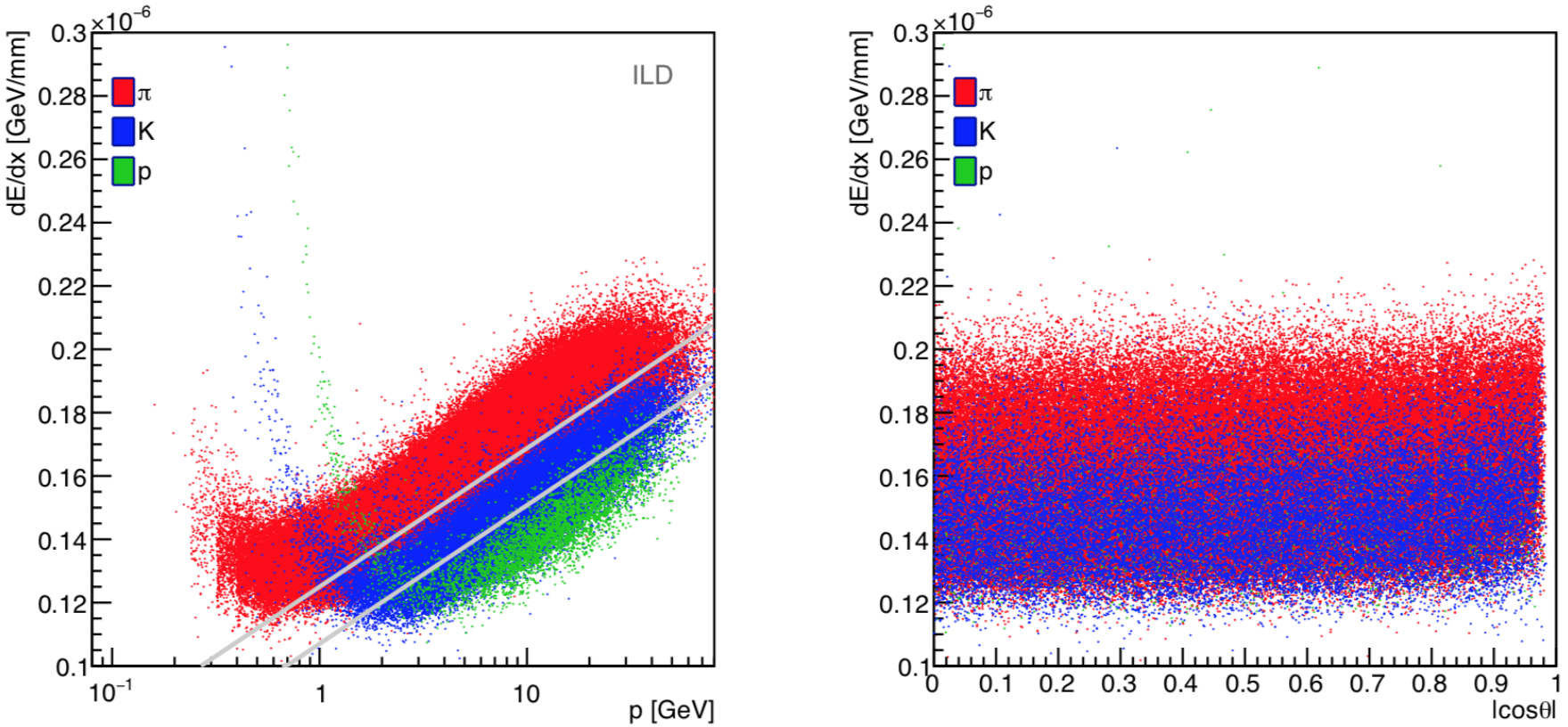

Figure: The energy deposition per track length dE/dx as function of the particle momentum, the particle polar angle $|\cos\theta|$ for different particles. Two gray lines separate out the region with a maximal kaon concentration.

Nkaons: 55563, nprotons: 4954, npions: 324875

Purity

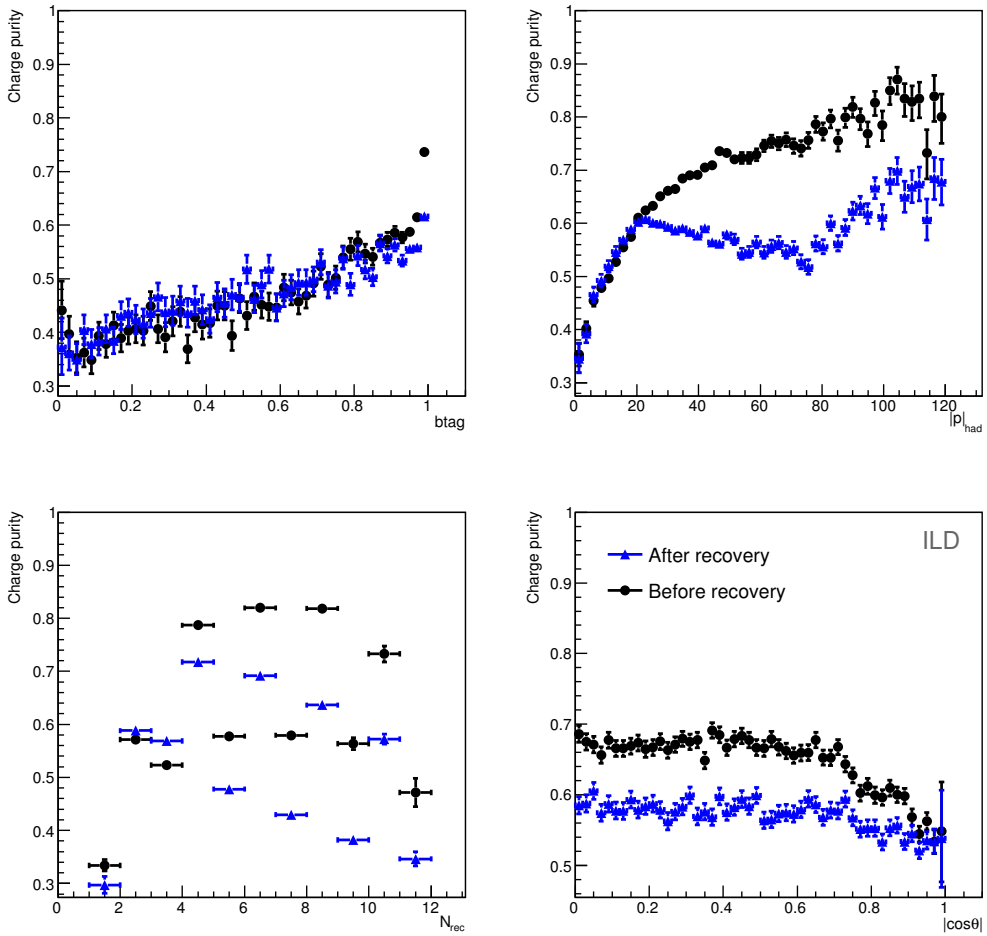

Figure: Comparison of b charge purity before and after Vertex Recovery.