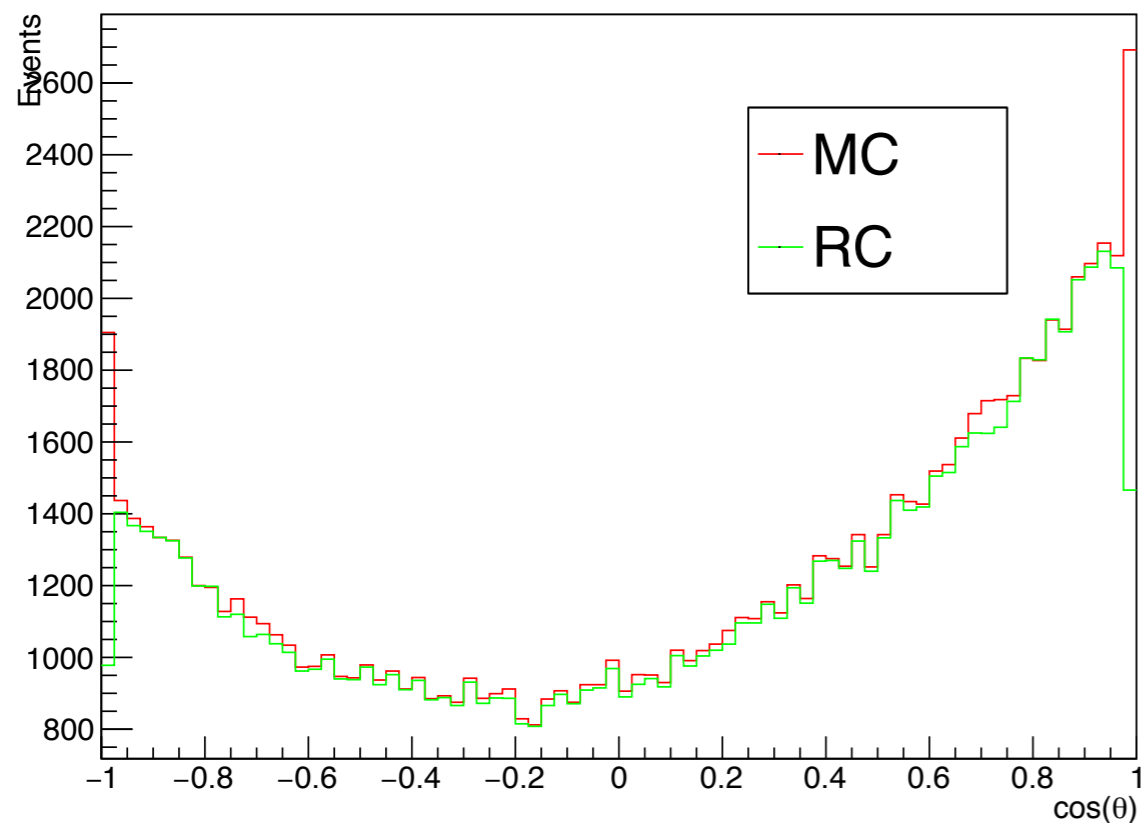# Forward-Backward Asymmetry in $e^+e^- > \mu^+\mu^-$ at Z Pole

Li Mengran

5th June 2017

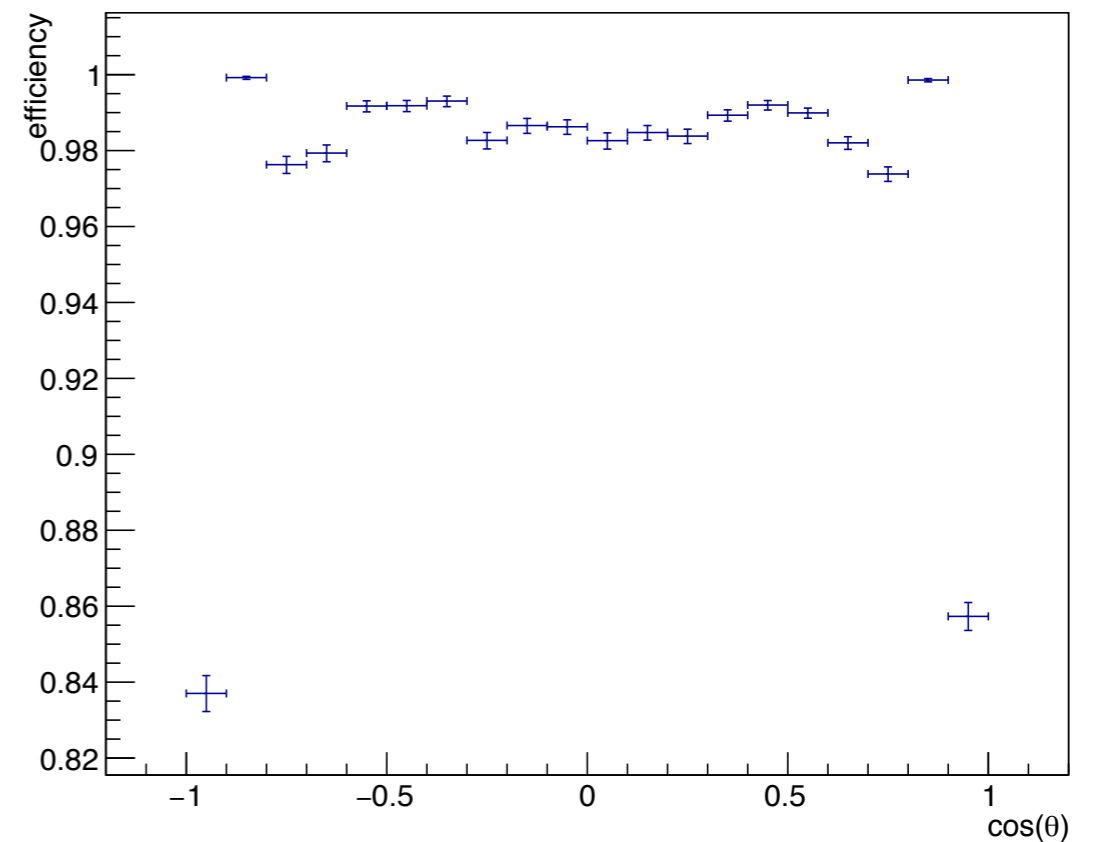# Find the reason for the bug in error of efficiency.
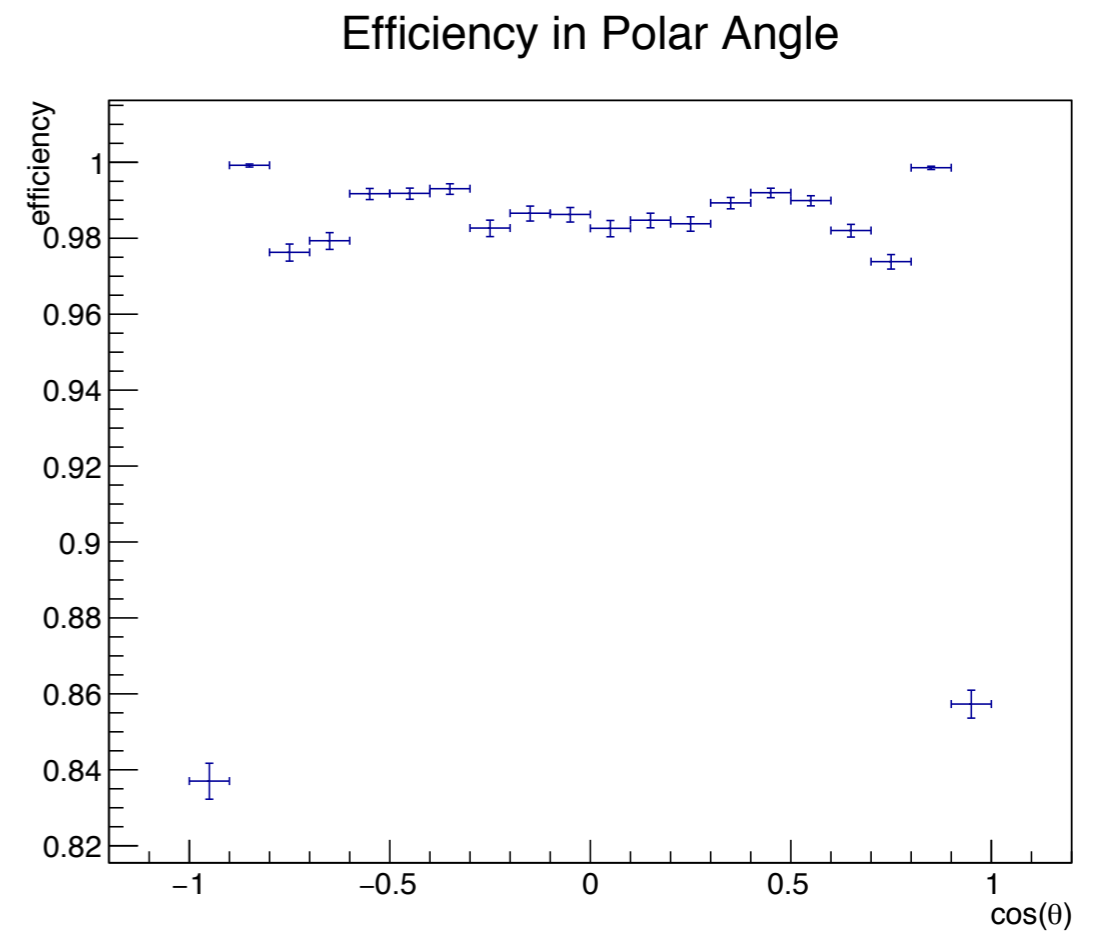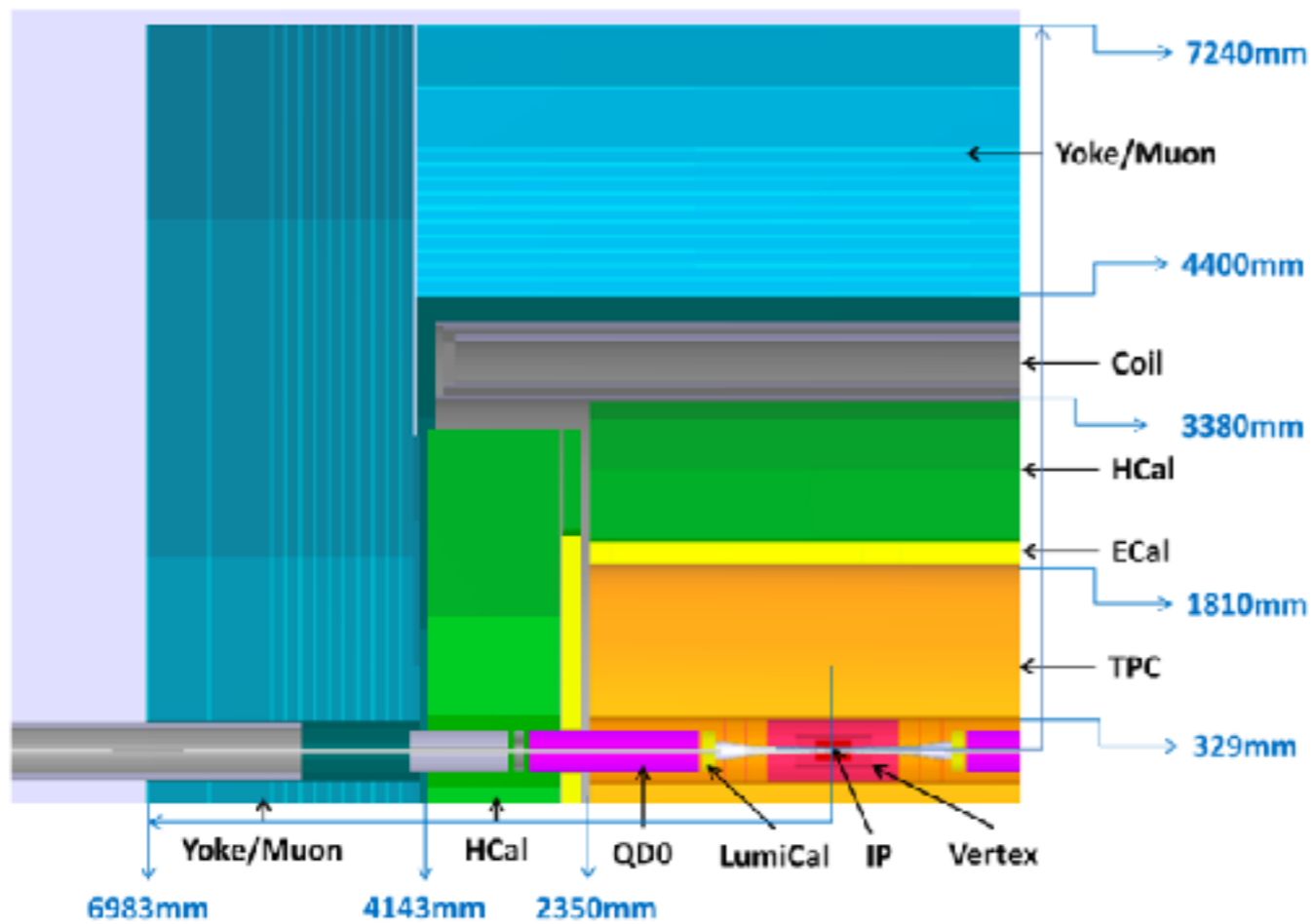It is due to misuse of TGraphAsymmErrors::BayesDivide().

Use Monte Carlo events as total events to calculate efficiency η=RC/MC

Low efficiency at double sides is due to coverage,

Error is bigger at double sides.

Cosθ of ECal inner side is 0.792;

That of HCal outer side is 0.775.