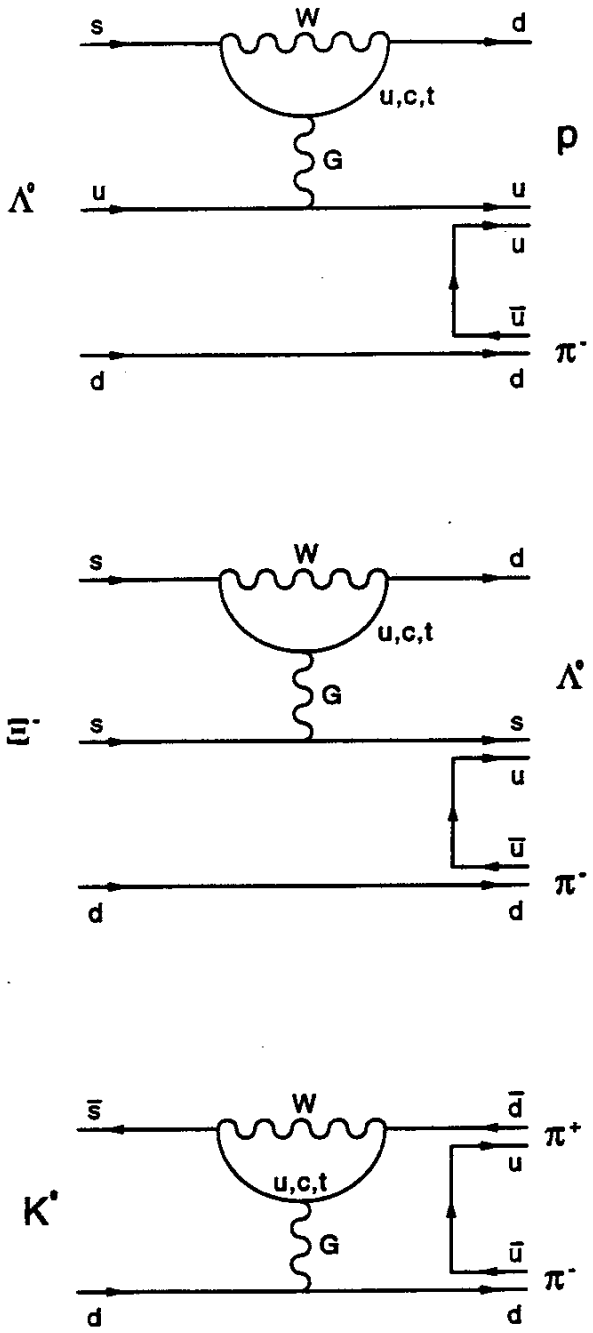
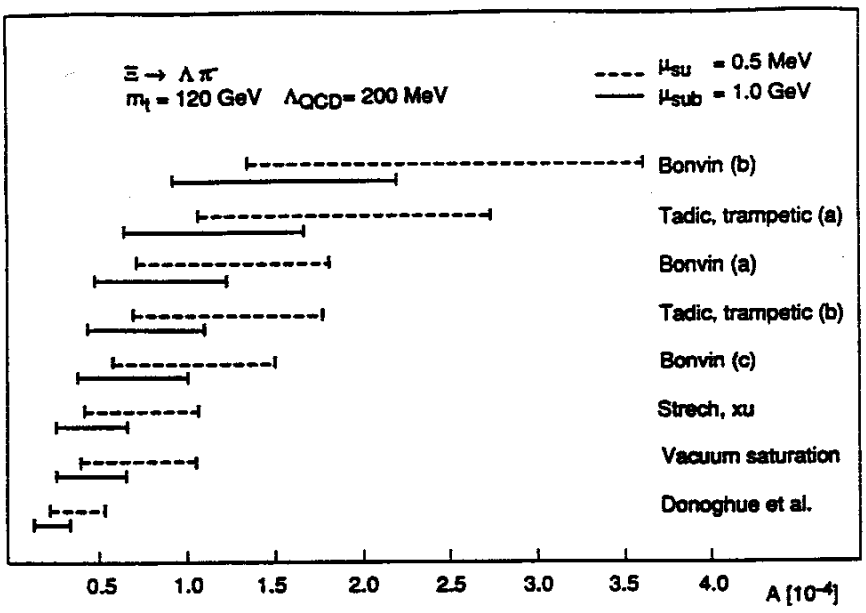


Figure 1: Penguin diagrams responsible for $|\Delta S| = 1$ direct CP violation in $\Lambda \to p\pi^-$, $\Xi^- \to \Lambda\pi^-$ and $K \to \pi^+\pi^-$ decays according to the standard model.



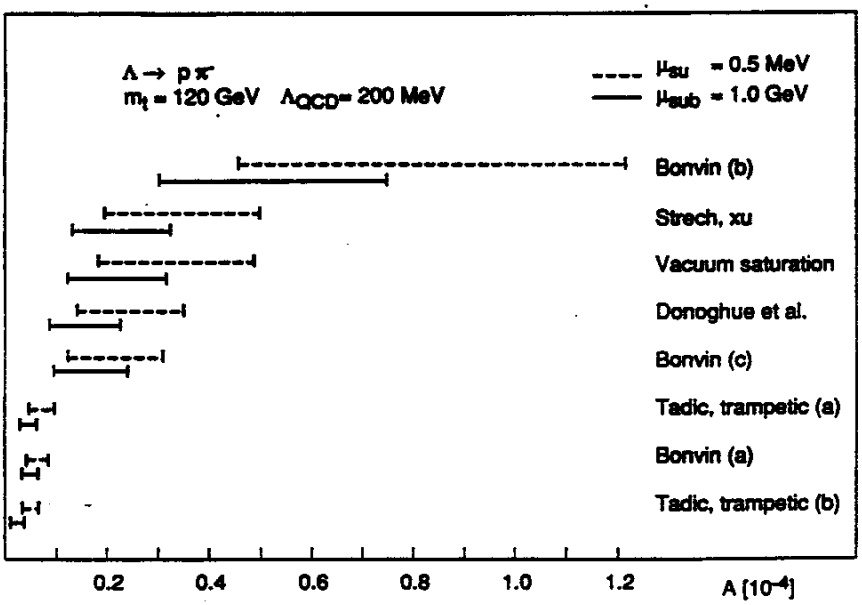
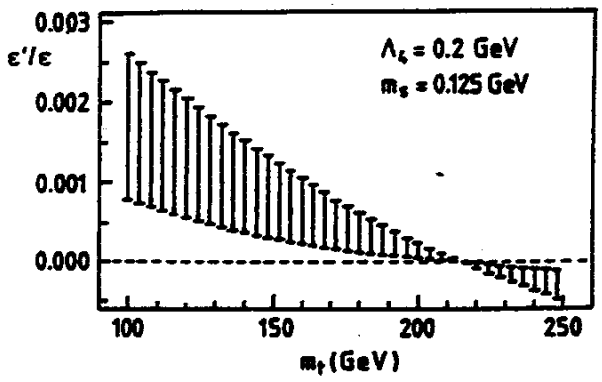


Figure 2: Range of standard model predictions of (a) $(\alpha_\Xi + \alpha_{\overline{\Xi}})/(\alpha_\Xi - \alpha_{\overline{\Xi}})$ and (b) $(\alpha_\Lambda + \alpha_{\overline{\Lambda}})/(\alpha_\Lambda - \alpha_{\overline{\Lambda}})$ from the model of Xe, Steger, and Valencia [21] using matrix elements calculated from various models.



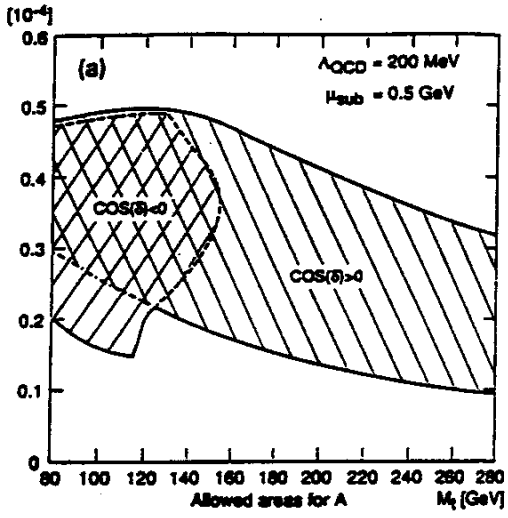


Figure 3: Standard model predictions for (a) ϵ'/ϵ [17] and (b) $(\alpha_\Lambda + \alpha_{\overline{\Lambda}})/(\alpha_\Lambda - \alpha_{\overline{\Lambda}})$ [16] showing the dependence on the top quark mass.

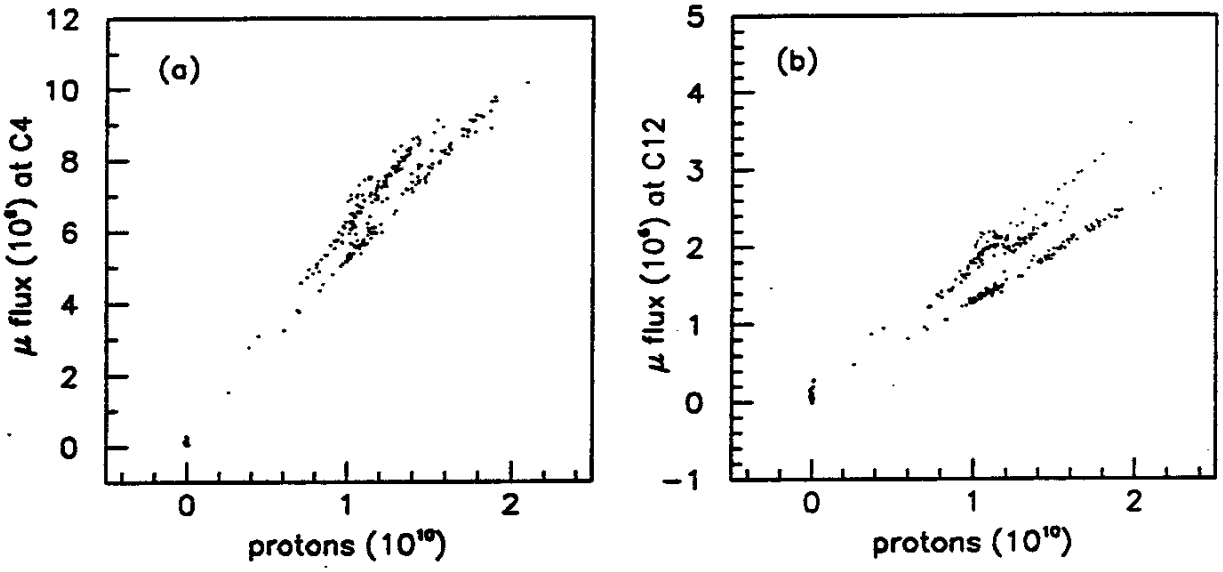


Figure 4: Muon fluence measured in E756 at (a) an upstream chamber (*C4*: 26 m from the collimator exit), and (b) a downstream chamber (*C12*: 49 m from exit).

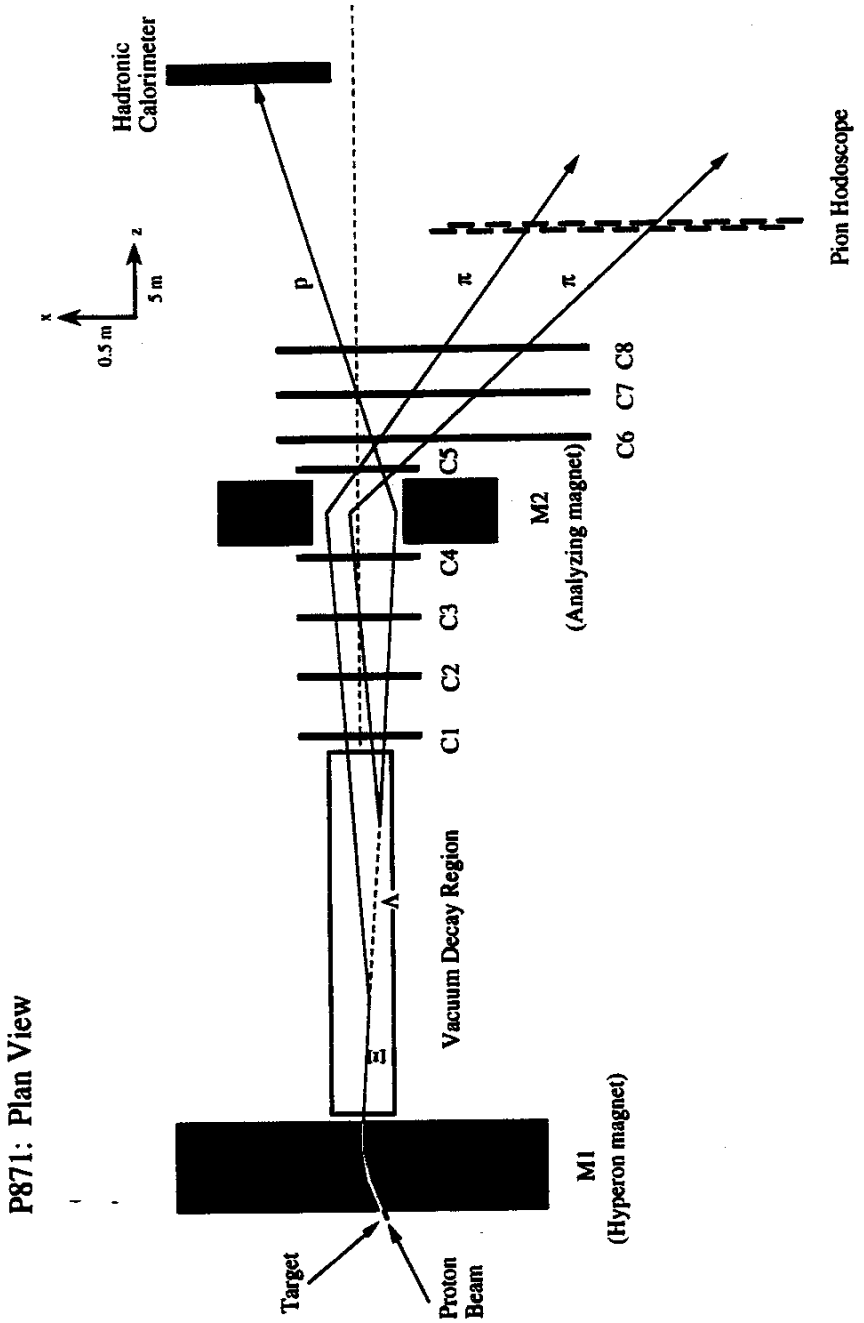


Figure 5: Plan view of the P871 spectrometer.

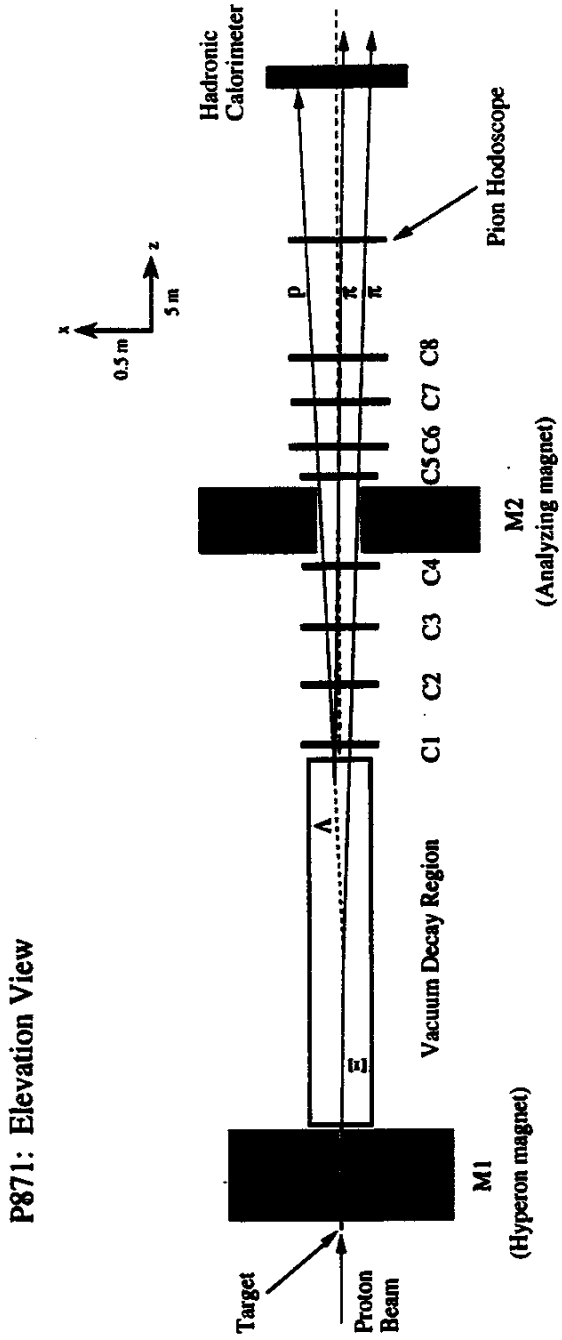


Figure 6: Elevation view of the P871 spectrometer.

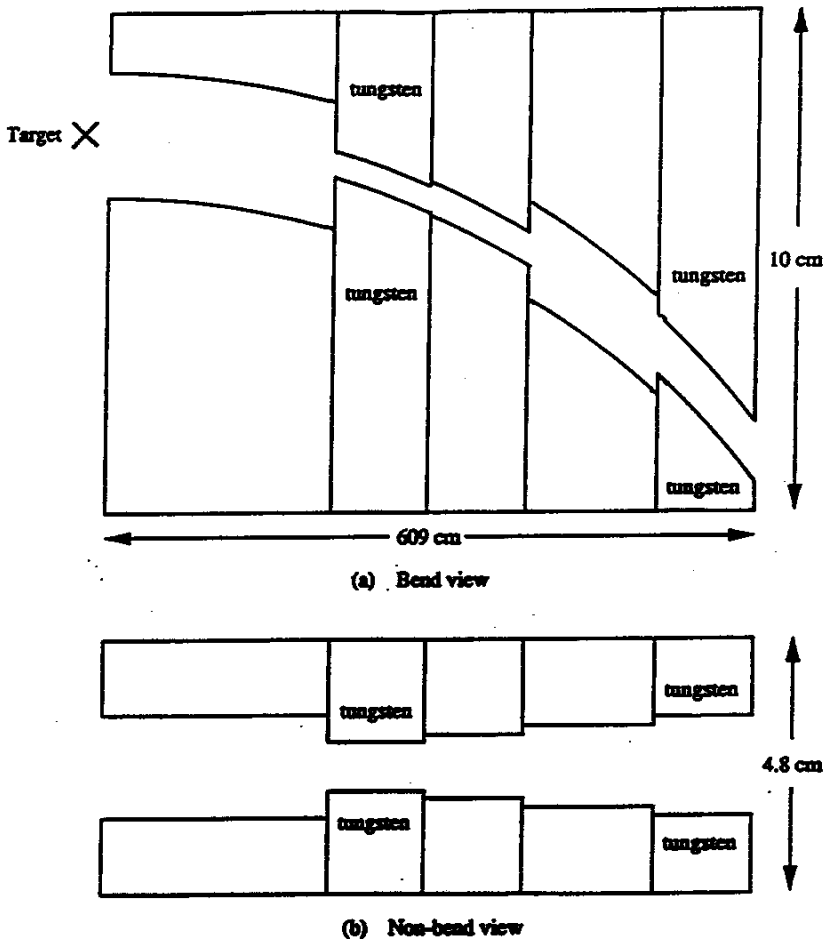
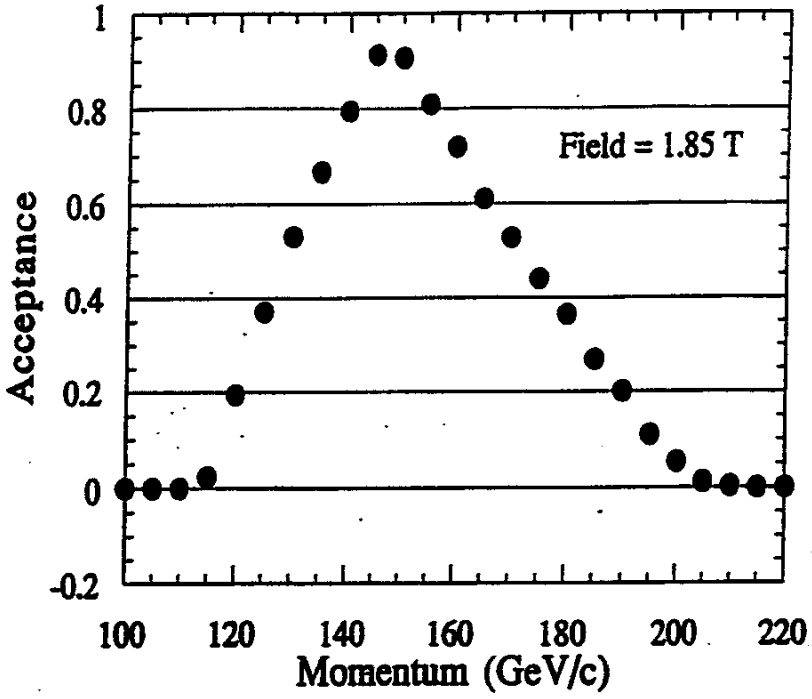


Figure 7: The P871 hyperon channel.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200
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Momentum (GeV/c)