$Z_m(\mu = 2.000 \text{ GeV})$  $Z_m(am_q) = k_1 + k_2 am_q \log(am_q) + k_3 (am_q)^2$ **C**1 F1S 4.8 fit *p*-value:0.29 fit *p*-value:0.00 5.6  $--am_q^* (M_{\eta_c}^* = 2.4 \text{ GeV})$  $---am_q^* (M_{\eta_c}^* = 2.4 \text{ GeV})$ 3.4 - $---am_q^* (M_{\eta_c}^* = 2.6 \text{ GeV})$  $---am_q^* (M_{\eta_c}^* = 2.6 \text{ GeV})$  $---am_q^*(M_{\eta_c}^*=PDG)$  $---am_q^*(M_{\eta_c}^* = PDG)$ 5.4 4.6  $\mathbf{\underline{\int}}$  simulated  $am_q$ simulated am<sub>q</sub> 3.3 -5.2 -4.4 5.0 3.1 4.2 4.8 fit *p*-value:0.70 3.0 - $---am_q^* (M_{\eta_c}^* = 2.4 \text{ GeV})$ 4.0 4.6  $---am_q^* (M_{\eta_c}^* = 2.6 \text{ GeV})$  $---am_q^*(M_{\eta_c}^* = PDG)$ simulated  $am_q$ 2.9 -0.40 0.45 0.50 0.20 0.40 0.40 0.45 0.20 0.25 0.30 0.35 0.15 0.25 0.30 0.35 0.45 0.10 0.15 0.20 0.25 0.30 0.35  $am_q$