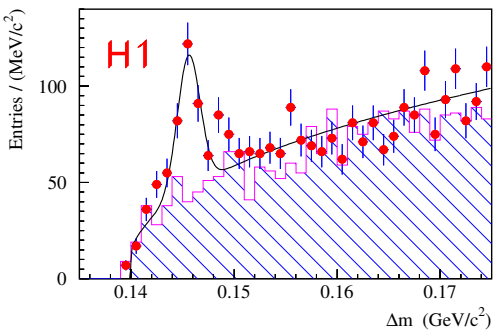
Detection of Open Charm

Production of charm is tagged through the detection of $D^{*\pm}$ mesons:

$$D^{*+} \longrightarrow D^0\pi_s^+ \longrightarrow K^-\pi^+\pi_s^+$$
$$\longrightarrow K^-\pi^+\pi^-\pi^+\pi_s^+$$

D^{*+} mesons identified with ΔM method

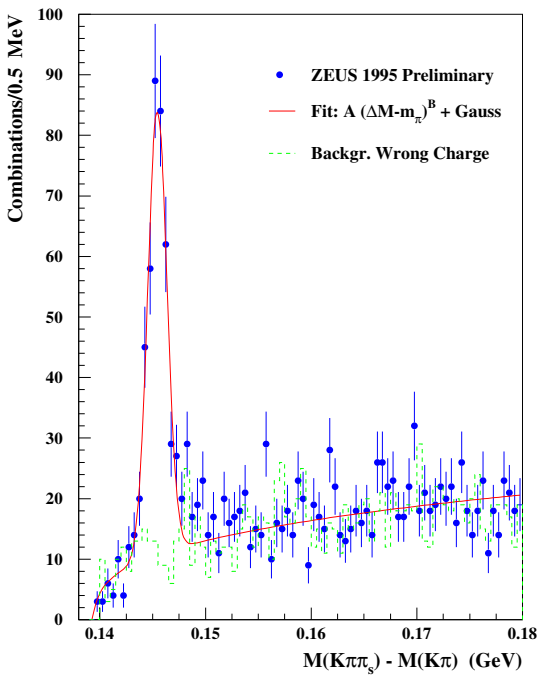


H1 1994 γp

$p_t(D^*) > 2.5\,\mathrm{GeV}$
$-1.5 < \hat{y}(D^*) < 1.$

~ 150 events

ZEUS 1995

$p_t(D^*) > 3\,\mathrm{GeV}$
$-1.5 < \eta(D^*) = -\ln\tan\frac{\theta}{2} < 1.$

~ 300 events