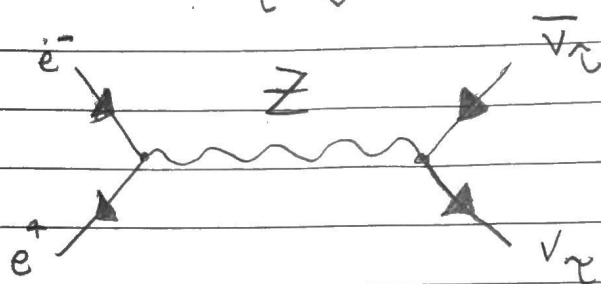


PSE T 12

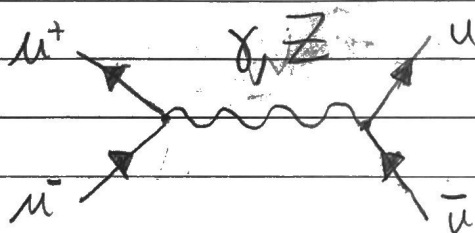
Electroweak Bosons W , Z , and γ

1a) $e^+e^- \rightarrow \nu_e \bar{\nu}_e$

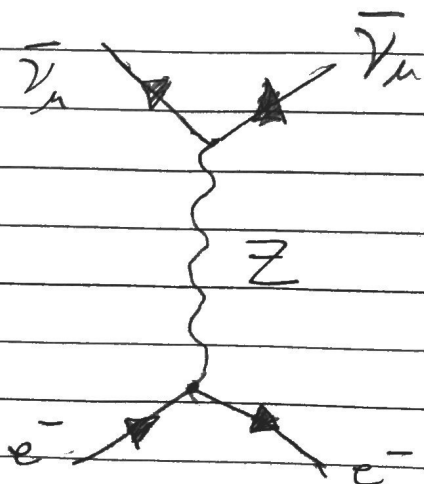


γ doesn't work
b/c products aren't
charge

1b) $\mu^+\mu^- \rightarrow u\bar{u}$, $u = \text{up quark}$.



1c) $\bar{\nu}_\mu + e^- \rightarrow \bar{\nu}_\mu + e^-$

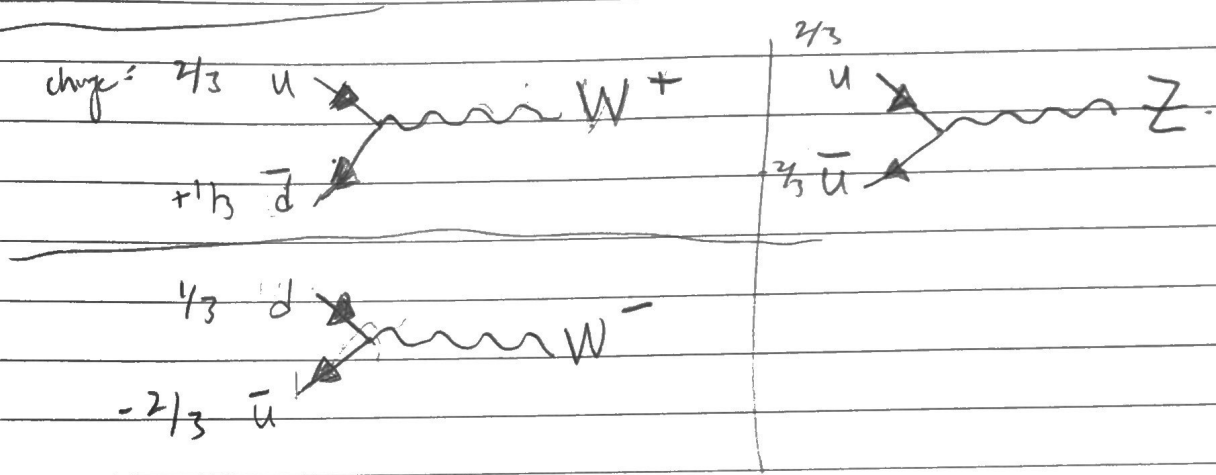


wrong order

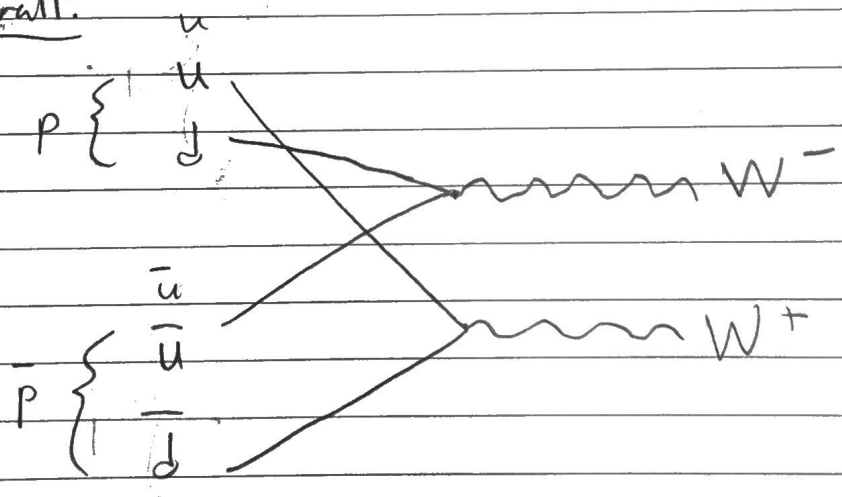
(1c) $p\bar{p} \rightarrow W^+W^-$

lev. $\frac{16el}{lev}$

$\bar{p}: \bar{u}\bar{u}\bar{d}$, $p: uud$



Overall:



(1d) — wrong order

$\bar{\nu}_e + e^- \rightarrow \bar{\nu}_e + e^-$

