$${}^{A}_{Z}X^{N} \rightarrow {}^{A}_{Z+1}Y^{N-1} + e^{-} + \bar{\nu}_{e} \quad (\beta^{-})$$

$$n \rightarrow p + e^{-} + \bar{\nu}_{e}$$

$$\nu_{e} + e^{+} + n \leftarrow p \qquad (\beta^{+})$$

$$\nu_{e} + e^{+} + {}^{A}_{Z-1}Y^{N+1} \leftarrow {}^{A}_{Z}X^{N}$$

$$x + n \leftarrow p + e^{-} \qquad (CF)$$

$$v_e + n \leftarrow p + e^- \tag{CE}$$

 $v_e + {}^A_{7-1} Y^{N+1} \leftarrow {}^A_7 X^N + e^-$