## Helium Burning

$$^{4}$$
He +  $^{4}$ He <==>  $^{8}$ Be  $^{8}$ Be +  $^{4}$ He  $\rightarrow$   $^{12}$ C +  $\gamma$ 

if the concentration of carbon-12 is high enough...

$$^{12}C \ + \ ^4H \ \rightarrow \ ^{16}O \ + \gamma$$
 
$$^{16}O \ + \ ^4H \ \rightarrow \ ^{20}Ne \ + \ \gamma$$