

Quick notes on
Hydrogen Burning

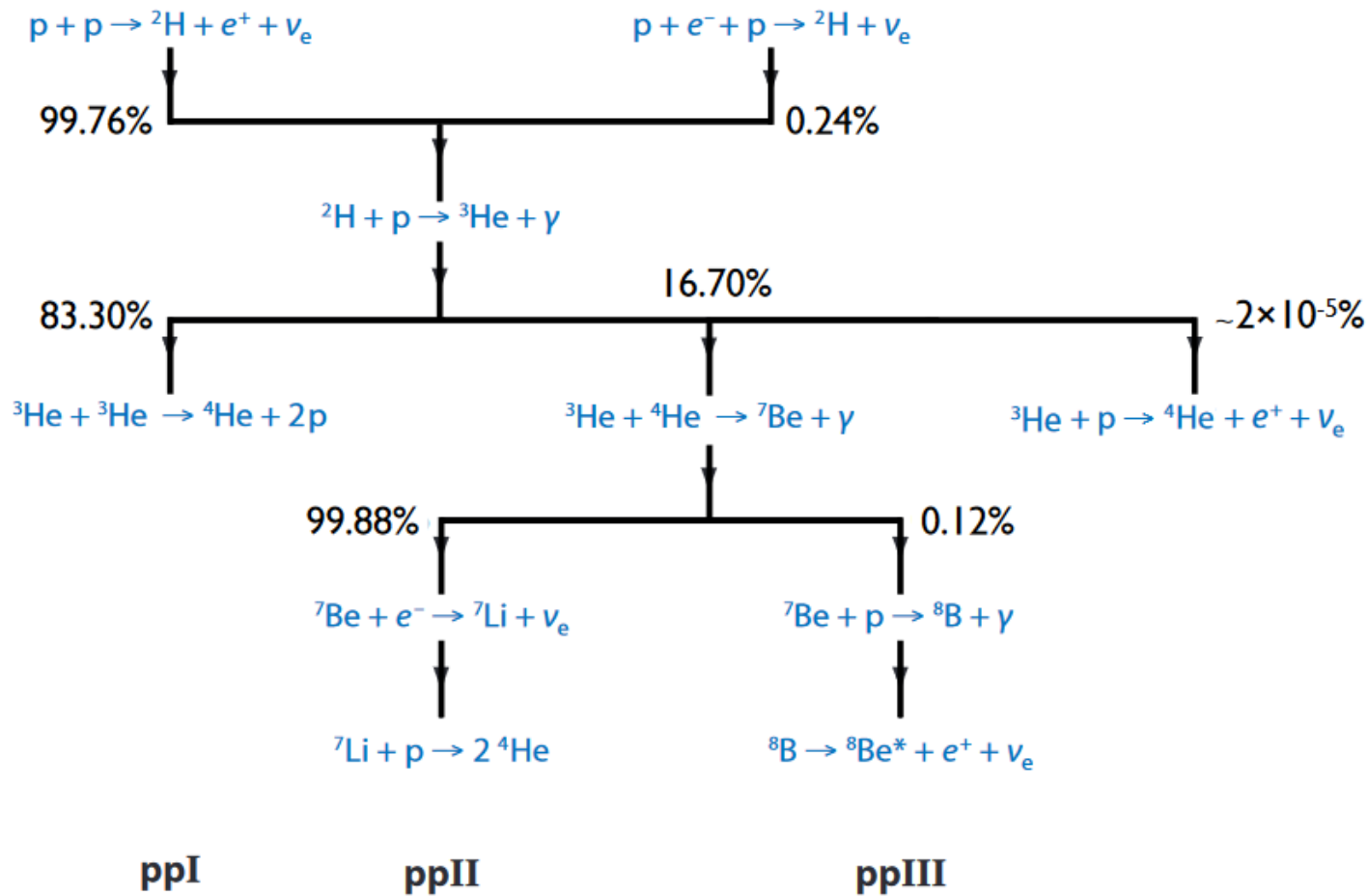
Zach Meisel

Ohio University - ASTR4201 - Fall 2020

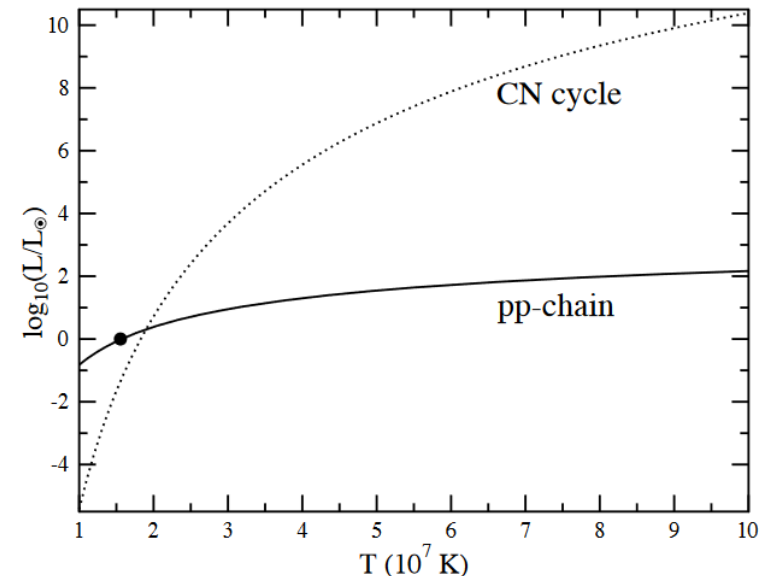
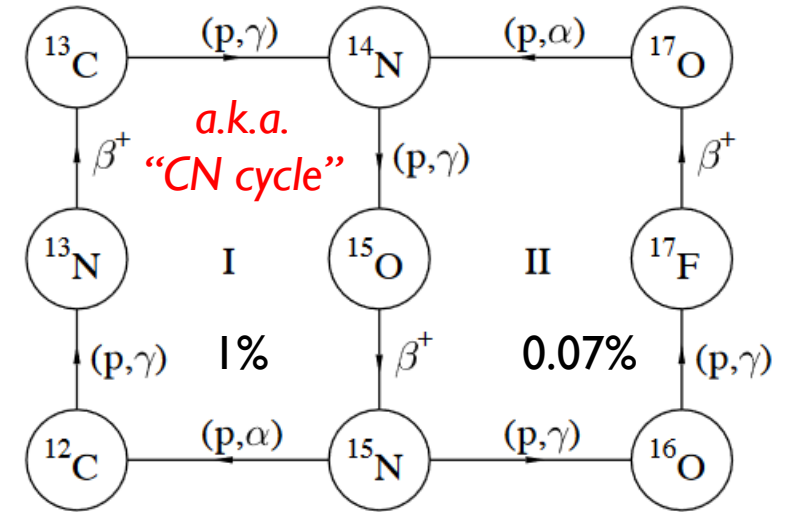
Hydrogen Burning on the Main Sequence

PP chains

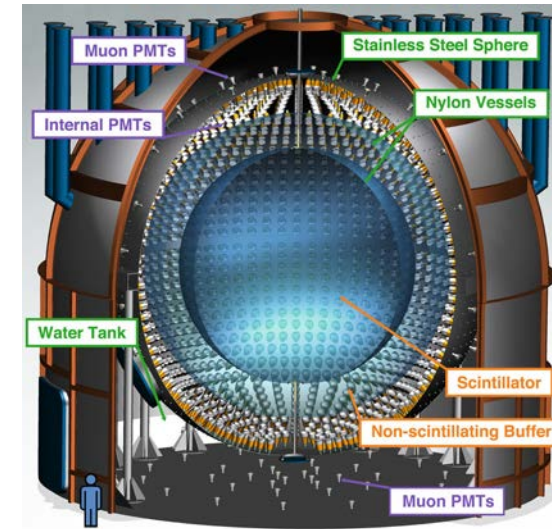
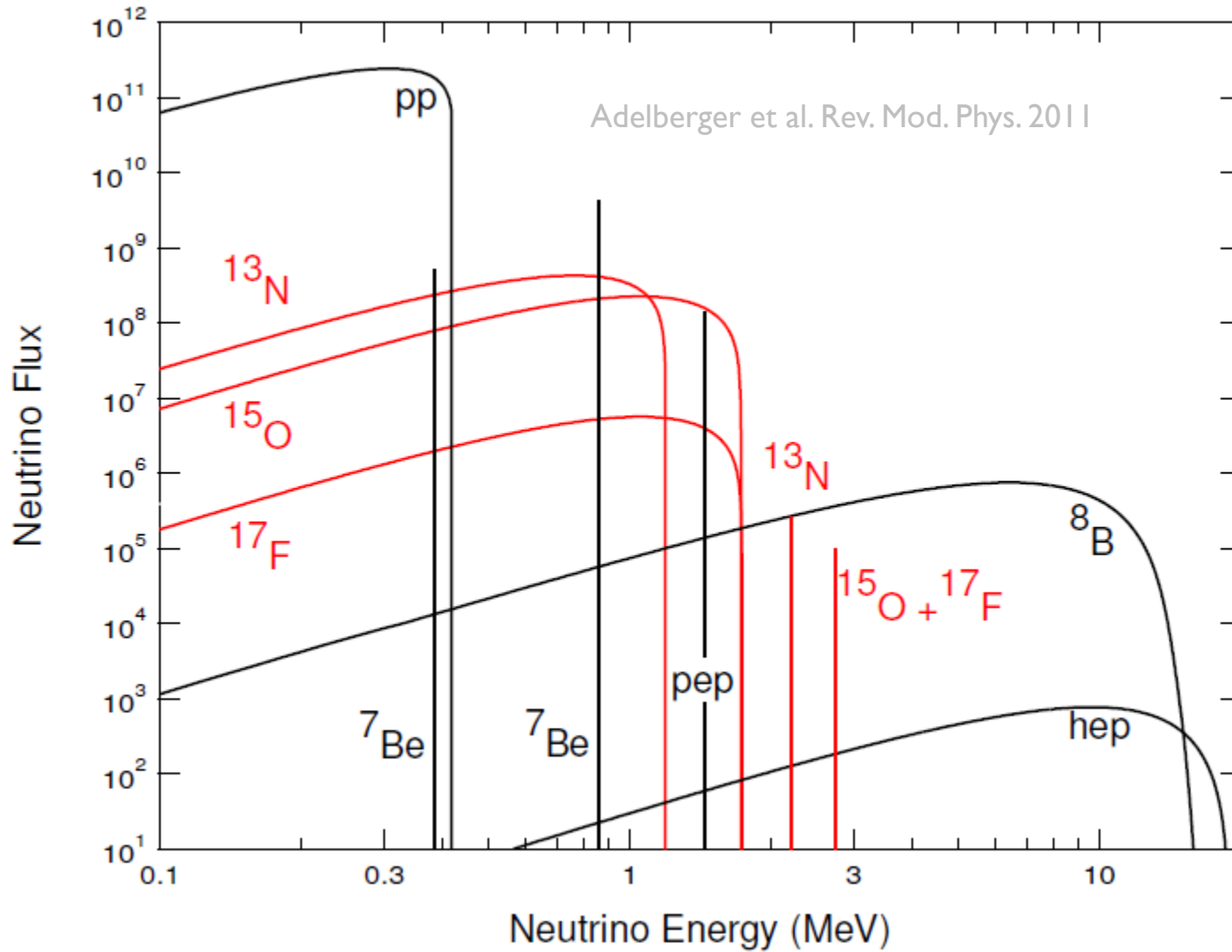
percentages are for solar temperature



(cold) CNO cycles

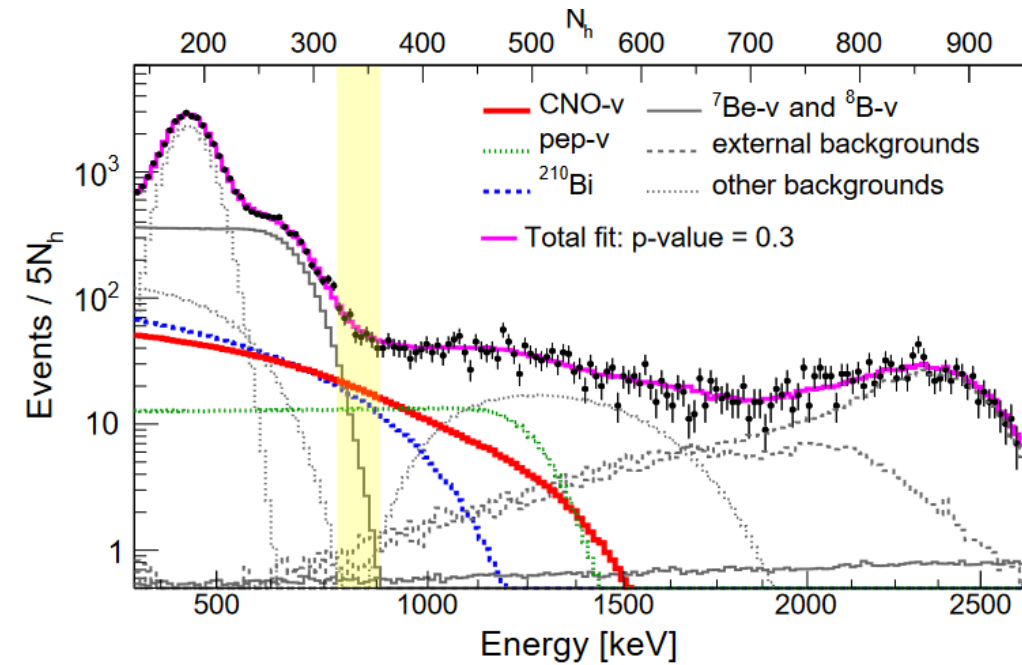


Hydrogen Burning in the Sun: Neutrino Signature

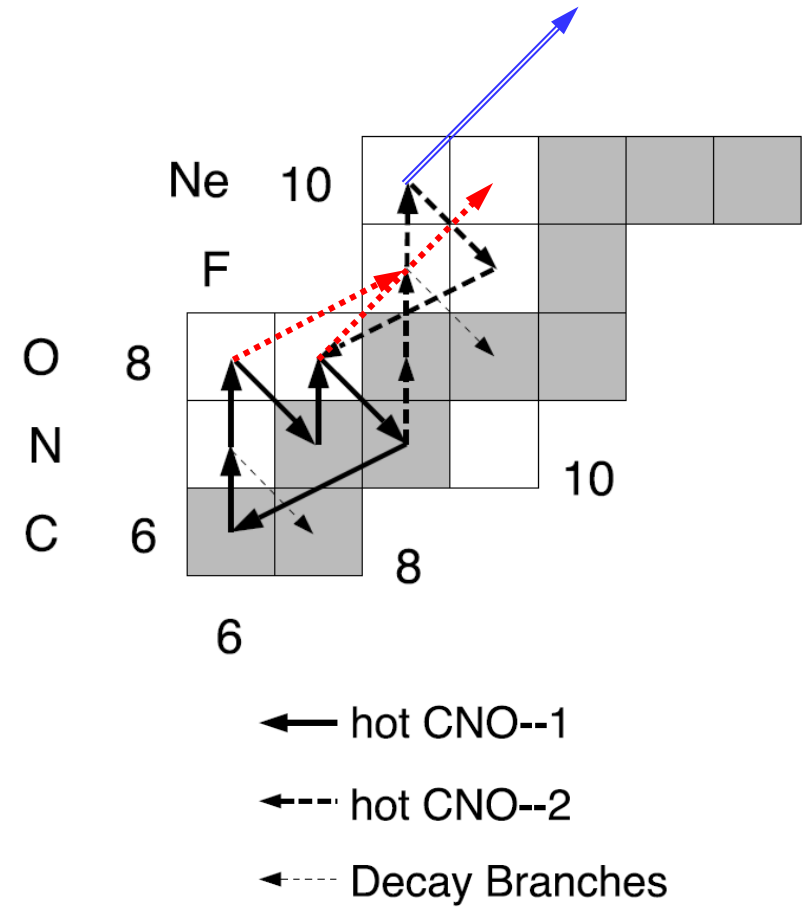
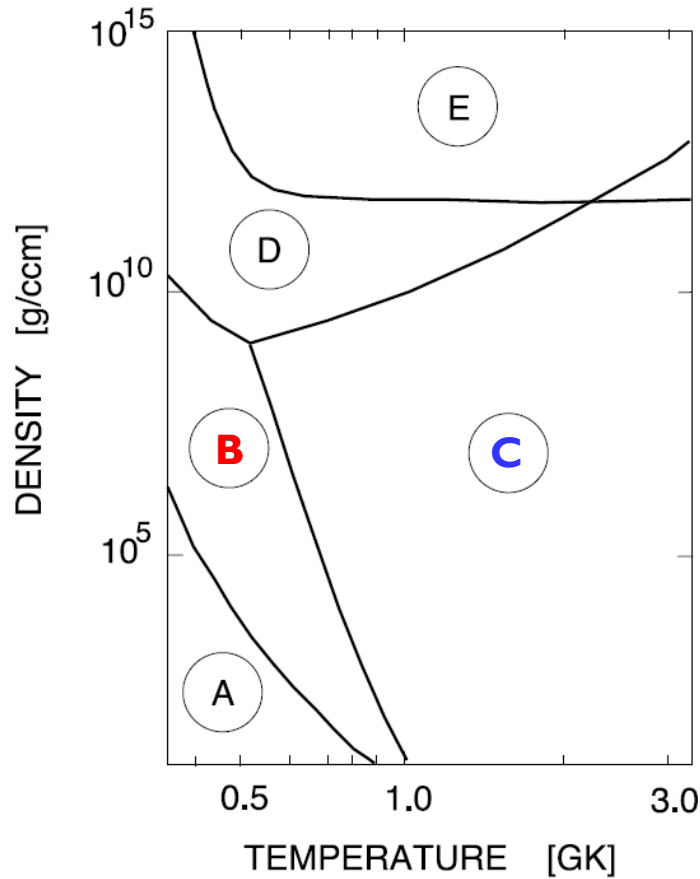
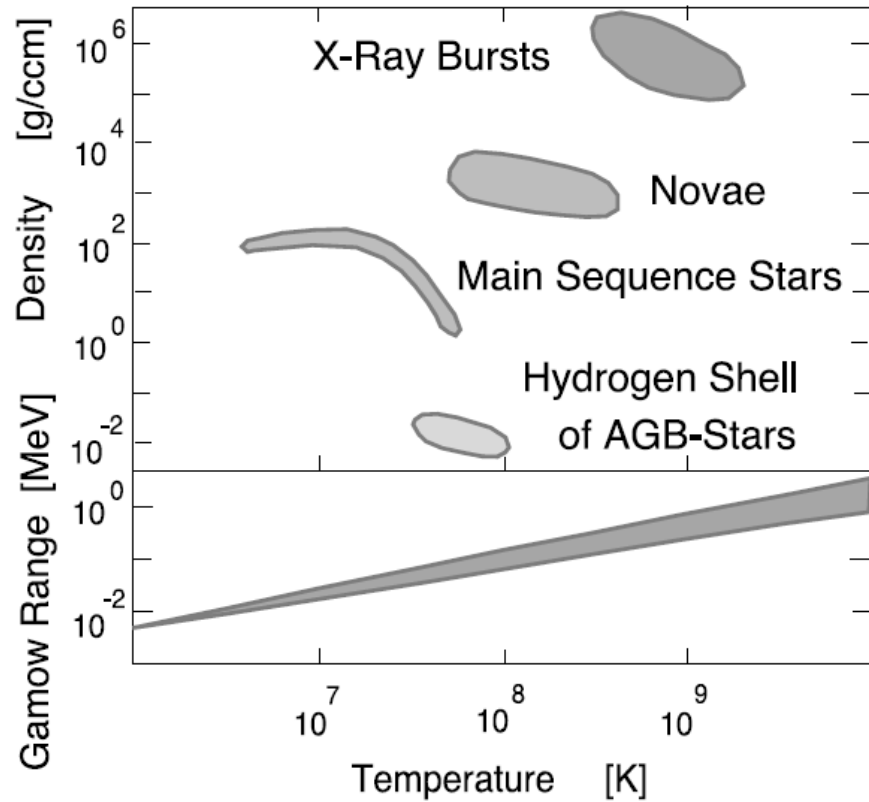


~280,000 kg of liquid scintillator surrounded by ~2200 PMTs detect ν via scattering with e^-

BOREXINO collaboration, arXiv:2006.15115 (2020)



Hot Hydrogen burning



Explosive Hydrogen burning

