Presentation: Yenuel Jones-Alberty
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Question and Answer: Kristyn Brandenburg
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Experimental study of the p1/p0 ratios of resonance states in ^{8}Be for deducing the ^{7}Be(n, p1) ^{7}Li* reaction rate relevant to the cosmological lithium problem

N. Iwasa et al. PRC 103, 015801 (2020).

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1. What other experiments or theories have been developed to explain the cosmological lithium problem? **[Joseph]**
2. What is the situation with direct measurements of 7Be(n,p0), 7Be(n,p1), and 7Be(n,alpha)? **[Shiv]**
3. Why were the scintillator and wire chamber placed at an angle? What is the ΔE-E method of particle identification? **[Robert]**
4. Why are magnetic poles M1D1M2D2M3 arranged this way? How does this specific order help for the inclusion of larger solid angle and energy resolution? **[Alexandra]**
5. How does the magnetic rigidity relate to the alpha energy, since this is the physical quantity being measured? **[Nisha]**
6. What is a double and triple differential cross section and why are they fit with legendre polynomials? **[Justin W.]**
7. We know that there is a shortage of observed Lithium by 3 or 4x based on predictions, but are there any discrepancies with the amount of Hydrogen and Helium observed/ predicted that may change the predictions of Lithium? Why does the ^{7}Li abundance diverge when the models are successful at predicting other BBN isotopes? **[Mahesh]**
8. Because the oldest stars in galaxies/ the universe only had Hydrogen and Helium as the primary gases for formation, why do we expect Lithium to be more abundant? Do these older stars (Population II), even have enough mass to cause the proton-proton II chain to occur? **[Justin B.]**
9. Why do the author leave those 3 points out of the best fit curve in the bottom plot of the double differential cross section plot? **[Joey]**
10. Why do the resonance states get wider at higher energy? Why do the results for (2-) and (3+) have such large uncertainties? **[Jacob]**