

Abstract Submitted
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Event analysis in nuclear emulsion for E07 experiment MYINT KYAW SOE, KAZUMA NAKAZAWA, JOHNYA YOSHIDA, KHIN THAN TINT, ARKIHITO MISHINA, SHINJI KHINBARA, ENDO YOKO, ITOH HIRO, HIDE-TAKA KOBAYASHI, Gifu University, J-PARC E07 COLLABORATION — In near future, the E07 experiment will be carried out for beam exposure at J-PARC to search for double strangeness ($S=-2$) system. We expect to analyze nearly 10^2 or more double- Λ hypernuclei and 10^8 single hypernuclei in the E07 experiment. Therefore we have to detect and analyze with the high speed to provide the information of double strangeness system in a suitable time. We are establishing and polishing analysis system with use of typical events detected by Overall-scanning method applied for E373 emulsion. The events with hammer tracks and single hypernuclei are very good samples to validate event analysis. We should calibrate our analysis system to identify the new events. The well-known mass of the ${}^8\text{Be}^*$ was reconstructed from the alpha particles back to back decayed in hammer tracks events applied by kinematic fitting method. All of reconstructed masses for ${}^8\text{Be}^*$ came into one sigma of the mass of ${}^8\text{Be}^*(7457.89\pm 0.75 \text{ MeV}/c^2)$. Thus we calibrated unambiguously our analysis system and analyzed single hypernuclei events. In my presentation, I will discuss event analysis with the kinematic fitting applied for hammer track events and single hypernuclei events.

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