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Establishment of Developing Method for the E07 Experiment YOKO ENDO, KAZUMA NAKAZAWA, KAORU HOSHINO, JYUNYA YOSHIDA, KHIN THAN TINT, MYINT KYAW SOE, SHINJI KINBARA, AKIHIRO MISHINA, HIROKI ITO, HIDETAKA KOBAYASHI, Gifu University, J-PARC E07 COLLABORATION — J-PARC E07 experiment is to understand Λ-Λ interaction by the detection of double-hypernuclei events in nuclear emulsion plate about 10times larger statistics than that in the KEK-PS E373 experiment. We must optimize photographic developing method for E07 experiment. Nuclear emulsion plates for E07 experiment to develop are about 1300 plates of thick type and about 220 plates of thin type. Their size is twice as large as E373 experiment (350×345 mm^2). It will take 23cycle to develop all of plates. (1 cycle is 8 days.) In order to establish the method, we have to check following issues such as. 1) "Fog density," which disturb analysis, should be 3.0 or less/1000 μm^3 Current fog density is 2.25 ± 0.23/1000 μm^3 2) "Grain density," which corresponds to energy loss of charged particles should be $25 \sim 30$/100 μm. Current grain density is 28.65 ± 4.86/100 μm. 3) Uniform sensitivity in nuclear emulsion plates 4) Possibility to develop mass huge amount and large sized emulsion plate In our presentation, I will discuss about tests and their results to establish developing method for the E07 experiment.

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