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Studies of TPB dissolved in Toluene RUEL JERRY, Howard University, LINDLEY WINSLOW, JANET CONRAD, MIT — Scintillation light in liquid argon calorimeters is produced at 128 nm. This must be shifted to the visible so that the light can be observed by phototubes. A traditional method for accomplishing this is to dissolve Tetraphenyl butadiene and plastic into toluene, and then use this mixture to coat surfaces. After the toluene evaporates, the TPB in the thin plastic skin will shift the light. In both the WARP and MicroBooNE experiments, it has been observed that impure TPB will react with Toluene when exposed to light turning the mixture green. We report on this effect in this talk.

> Ruel Jerry Howard University

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