Contribution ID: **231** Type: **Oral (Student, In Competition) / Orale (Étudiant(e), inscrit à la compétition)**

Characterization of DEAP-3600 PMTs

Thursday 19 June 2014 09:30 (15 minutes)

The DEAP (Dark Matter Experiment with Argon and Pulse-shapeDiscrimination) collaboration is currently building a 3600 kg detector that is planned for completion by summer of 2014. The detector will utilize 3600 kg of argon
as target volume. Any event occuring inside the detector will be monitored by
measuring the wavelength-shifted light with 255 Hamamatsu high quantum
efficiency R5912 PMTs. Certain parameters of these PMTs can effect the ability of our pulse-shape discrimination method to distinguish backgrounds and signals; these essential parameters such as timing, relative efficiency, afterpulsing and dark rate were measured and characterized, and will be presented.

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