

# DEAP3600 Hardware Upgrades and Lightyield Automation

*Tuesday, August 20, 2024 2:05 PM (10 minutes)*

One of the likely candidates of dark matter particles are WIMPs (Weakly Interacting Massive Particles). In the efforts of detecting these WIMPs, the DEAP3600 detector has been designed for use in extremely low levels of radioactivity using a large target of liquid argon. Over this summer, hardware improvements and upgrades to the DEAP3600 argon system have been made in preparation for the upcoming third fill. Also using code from a previous student combined with newer Python tools, I developed a script for the automation of light yield calculations in an effort to expedite the analysis of meaningful data collected in the DEAP3600 database.

## What area of study best describes your talk?

Physics

**If you answered 'Other', please provide the study area.**

**Primary author:** MONK, Cheyanne (Carleton University)

**Presenter:** MONK, Cheyanne (Carleton University)

**Session Classification:** Presentations