



Contribution ID: 236

Type: **Oral Presentation**

## **Review of Photodetector Technology: Status and Future Goals**

*Thursday, August 1, 2019 2:00 PM (18 minutes)*

The detection of photons is fundamental to the detection of particles. The photomultiplier tube (PMT) has been the workhorse of photodetection for over fifty years. It provides robust, low noise, detection of single photons with nanosecond timing. However, we have reached fundamental limits in its performance and production scaling. This talk will review the status of photodetectors from PMT alternatives through new cryogenic sensors operating at the quantum limit.

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**Session Classification:** Particle Detectors

**Track Classification:** Particle Detectors