CALIFORNIA SCIENCE & ENGINEERING FAIR
2018 PROJECT SUMMARY

Name(s)
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Project Number
S1805

Project Title
Affordable Quantum Entanglement Detector

Abstract

Objectives/Goals
Using gamma rays from Na-22 matter-antimatter annihilation, we can generate entangled gamma rays, we hope to design quantum gate using aluminum.

Methods/Materials
Geiger counter boards, Aluminum, Lead, Na-22, Geiger tubes, Arduino board

Results
Making a low-cost quantum gate. Using lead to block all radiation outside to maximize gamma rays detection result in the polarized states.

Conclusions/Discussion
Although there are more expensive quantum gates, we are able to make a less expensive one with substantial efficiency and precision.

Summary Statement
We are able to build affordable quantum entanglement detector

Help Received
I recognize my science teacher Mr. Brown as our adviser and he helped us for buying materials (radiation source).