

Sensitivity of lunar particle-detection experiments

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The use of the Moon as a detector volume for ultra-high-energy neutrinos and cosmic rays, by searching for the Askaryan radio pulse produced when they interact in the lunar regolith, has been attempted by a range of projects over the past two decades. In this presentation, I will discuss some of the signal-processing considerations relevant to an experiment of this type, with reference to these past experiments, and the consequent effects on their sensitivity. I will also discuss the merits of different approaches for future experiments, and highlight their potential.

Summary

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