

Summary: Vetoing the high energy showers in the GRAPES-3 experiment whose cores lie outside the array

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What is this contribution about?

This contribution talks about methods to separate cosmic ray showers that have their true cores outside the array but reconstructed cores within the array.

Why is it relevant / interesting?

It helps in filtering showers with mis-reconstructed cores, thus improving energy spectrum measurements.

What have we done?

We have used cut based strategies, manually as well as using machine learning, to filter out such showers.

What is the result?

It has been shown that the energy spectrum measurements improve after the cuts and the contaminated showers reduce.