

Search Of Magnetic Monopoles With The NOvA Detector

Since Paul Dirac first put forward the idea of the magnetic monopole in 1931, there have been many experimental and theoretical efforts to find this elusive particle, but so far without any success. The NOvA experiment at Fermilab, is also trying to observe this mysterious particle. As we wait for the first data to be delivered by the NOvA far detector, we have made great strides in monopole simulation and reconstruction. I have implemented a new Hough Transform algorithm that allows us to separate the fast moving cosmic rays from the potentially slower moving monopoles.

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