

QUARKNET ANNUAL REPORT 2017 UNIVERSITY OF MISSISSIPPI

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In 2017 our QuarkNet group discussed several times during the year and settled on a 2 day summer workshop, June 26-27, 2017. The workshop covered analogue-to-digital conversion and passage of radiation through matter on the first day. We also discussed student math and science learning skills and the transition from high school to college. We began debugging and configuring the MSMS CRD detector which would be used for measuring the cosmic ray flux during the Aug 21, 2017 total eclipse, which would pass nearby.

On day two we discussed Neutrino Oscillations and connections with cosmic rays. We finished the workshop in a discussion of how the solar eclipse might affect the cosmic ray flux. Charles Vaughn, teacher from MSMS, volunteered to take his CRD to record and view the total solar eclipse, see figures below.

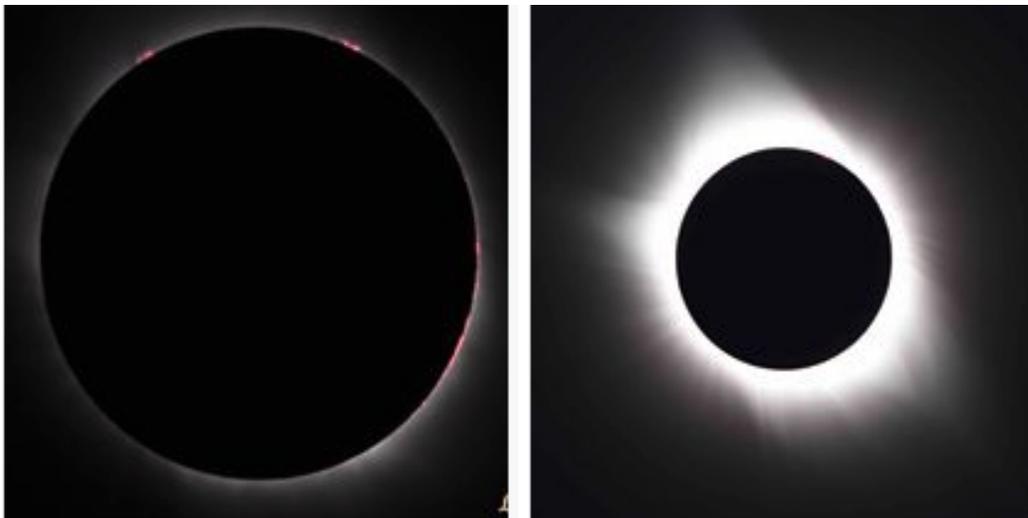


Figure 1: MSMS teacher and astronomer Charles Vaughn at the solar eclipse at the Fall Creek Recreation Area, Murfreesboro, TN, with the Mississippi QN CRDs. The eclipse photos of were taken by Lalith Perera near Sikeston, MO.