

Eric Appelt



Graduate Institution: Vanderbilt University

Location: Nashville, TN

Graduate Discipline: High Energy Nuclear Physics

Hometown: Nashville, TN

Research Interests:

Measuring azimuthal anisotropy in ultrarelativistic collisions of heavy ions, partonic energy loss through interaction with a quark-gluon plasma, heavy flavor dynamics in a quark-gluon plasma, pattern recognition of charged particle tracks in a high occupancy environment, particle simulation and reconstruction software development.

About me:

I am a member of the Compact Muon Solenoid (CMS) collaboration at the LHC, working with the heavy ion subgroup. This group is principally interested in measuring and understanding the properties of the hot dense state of nuclear matter produced in collisions between lead nuclei with a center of mass energy of up to $5.5 \text{ TeV}/c^2$ per nucleon.

My current CMS work focuses on the pattern recognition software, which reconstructs charged particle tracks from a series of energy deposits in the silicon tracking detectors. I am also working on modifying the data quality monitoring system to correctly interpret the detector output for heavy ion collisions, and I also expect to work on zero-suppression algorithms for the silicon tracking detectors.

Before beginning my graduate work in physics, I spent several years teaching high school mathematics and physics. I maintain an active interest in physics education and outreach.

Aside from my work in physics, I am interested in nature and the outdoors in general, especially backyard astronomy and birding.



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