Abstract Submitted for the 4CF12 Meeting of The American Physical Society

Testing the Sensitivity of the Pierre Auger Observatory in the Direction of AGN LEVI PATTERSON, ERIC MAYOTTE, ALEXANDRA WOOL-MAN, MICHAEL BRATTON, LAWRENCE WIENCKE, Colorado School of Mines, PIERRE AUGER OBSERVATORY COLLABORATION — We present a technique for measuring the absolute timing of the Pierre Auger Observatory. The technique uses laser shots from the Central Laser Facility that are aimed in the direction of ten astrophysical objects of interest. Using two years of this data we have accumulated sky maps of reconstructed laser direction in galactic coordinates. The data clusters around the direction of the target objects. From reconstructions of these laser shots we are also able to measure the absolute pointing direction and the angular resolution of the Pierre Auger Observatory using multi-eye FD hybrid data. This technique is planned for use with the JEM-EUSO project. This technique was developed by undergraduate physics majors at the Colorado School of Mines for their senior design projects.

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