Abstract Submitted for the APR21 Meeting of The American Physical Society

HAWC study of the ultra-high-energy gamma-ray source MGRO J1908+06 KELLY MALONE, Los Alamos Natl Lab, HAWC COLLABORATION — MGRO J1908+06 is one of the highest-energy known gamma-ray sources, with emission detected by the High Altitude Water Cherenkov Observatory (HAWC) extending past 200 TeV. HAWC is a gamma-ray detector located in Puebla, Mexico. Theoretical models using the HAWC data indicate that this source is largely leptonic, possibly driven by PSR J1907+0602, a radio-quiet pulsar. However, a second population is needed to fit the highest-energy gamma-ray emission. This component can be fit to either leptonic or hadronic hypotheses. This has implications for detections by multi-messenger experiments.

Kelly Malone Los Alamos Natl Lab

Date submitted: 05 Jan 2021 Electronic form version 1.4