Abstract Submitted for the CUWIP22 Meeting of The American Physical Society

Optical and X-ray Follow-Up to a Globular Cluster Ultraluminous X-ray Source in NGC 4472 WASUNDARA ATHUKORALALAGE, STEPHEN ZEPF, Michigan State University, KRISTEN DAGE, McGill University — The question of whether or not black holes are hosted by globular clusters is one of the leading open questions in Astronomy. While globular clusters are "black hole factories" through normal stellar evolution, some theories predict that black holes will be ejected early in the history of the globular cluster. However, recent observational work and theoretical studies in the last 15 years have suggested that this may not be the case, and studies of ultraluminous X-ray sources in extragalactic globular clusters have provided evidence of some of the most exotic black hole candidates in globular clusters. We have evidence that one of these sources might be an intermediate black hole.

Wasundara Athukoralalage Michigan State University

Date submitted: 11 Jan 2022 Electronic form version 1.4