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Weak Lensing Analysis of Cluster Merger Abell 1758 BRETT RAGOZZINE, DOUGLAS CLOWE, Ohio University, MAXIM MARKEVITCH, Harvard, Center for Astrophysics — A1758 is an ongoing merger between two galaxy clusters and the weak lensing results show the total gravitational potential of the system to be offset from the X-ray gas distribution for just one of the clusters. This result is different than previously published mergers (Bullet cluster and MACS J0025.4-1222) because they show an offset between the total mass of the system from the X-ray gas for both clusters. The new geometry of A1758 provides a way to test MOND gravity models such as Tensor-Vector-Scalar.

> Brett Ragozzine Ohio University

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