Abstract Submitted for the OSS18 Meeting of The American Physical Society

Stellar and gas kinematics in the elliptical galaxy NGC 2434 BRADLEY LOCKHART, JASON PINKNEY, Ohio Northern University — We observed the E0 elliptical galaxy NGC 2434 in 2001 using the BC spectrograph on the Magellan I 6.5-m telescope. The slit was not long enough to sample the sky spectrum without including galaxy light and so a new approach was developed for sky subtraction. We describe the approach elsewhere (see poster on NGC 7727) and report here on the findings for NGC 2434. The sky contamination in the NGC 2434 data was primarily airglow since it was observed in dark sky conditions. Our new sky subtraction method reveals that a little less than half of the counts at the ends of the slit (R=35") are attributable to sky and the rest are galaxy. The new method allows stellar kinematics measurements beyond 25" from the galaxy's center at two different position angles. Our kinematics help clarify the galaxy's major axis, which is ambiguous from surface photometry alone. Subtraction of a stellar template allows us to also measure extended gas kinematics in NGC 2434 from the residual [OIII] emission. We are aware of no other published gas kinematics for this galaxy.

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Date submitted: 02 Mar 2018

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