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A Modern Comparison of MOND and Conformal Gravity JAMES O'BRIEN, University of Connecticut, THOMAS CHIARELLI, Wentworth Institute of Technology, WILL KERIN, Springfield College — In recent years, there have been numerous papers in alternative gravitational theories attempting to give resolution to some problems in standard gravity. With more studies of the Radial Acceleration Rule (RAR) since 2017, and the extension of the Baryonic Tully Fisher (BTF) relation, comparison of theories can be more well established outside of pure comparison of rotation curves. In this presentation, we show how MOND and Conformal gravity accommodate some recent galactic surveys through the use of RAR and BTF and revisit some older surveys where alternative gravity has been challenged.

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