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A Principle Component Analysis of the HI Mass Fraction of Galaxies in the MaNGA Survey¹ SEAN DILLON, California State University, Chico, KAREN MASTERS, DAVID STARK, Haverford College — Neutral Hydrogen (HI) is the main fuel for star formation in galaxies. Using data from the MaNGA survey and HI follow-up of MaNGA galaxies as part of the HI-MaNGA program on the Green Bank Radio Telescope, we investigate correlations between the ratio of HI gas to stellar mass and other galactic properties, such as dust content, star formation rates, and stellar population age. We perform a Principle Component Analysis to reveal the most significant correlations.

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