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Measuring the Anti-quark Flavor Asymmetry in the Nucleon RUSTY TOWELL, Abilene Christian University, FNAL E906 COLLABORATION — Fermilab E866/NuSea performed the first measurements of Drell-Yan cross section ratio of p+p to p+d collisions over a large kinematic range, allowing the extraction of the ratio of anti-down to anti-up quarks in the proton. After reviewing E866 results, improvements that can be made on these measurements by taking advantage of the Fermilab Main Injector will be discussed. The lower energy of the Main Injector provides a higher Drell-Yan cross section, allowing the extension of all measurements to higher Bjorken-x with a modified spectrometer. E906 is an approved experiment that expects to make these measurements in the near future. Our goals, spectrometer design, and schedule will be presented.

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