Experimental Requirements

High Luminosity

Good PID (pion rejection)

Large angular range (up to ~60 degrees to reach highest Q^2 values)

Detection of high-momentum electrons (10+ GeV)

Moderate electron energy resolution (~0.1%)

The combination of HMS and SHMS in Hall C are optimal for this experiment.

SHMS covers the highest momentum electrons, (largest x values: needed for $\theta < 25$ degrees).

HMS covers the large angle (Q^2) range.

Both have adequate PID/resolution/acceptance.

Note that A(e,e'p) experiments at high Q^2 and large missing momentum require two high-momentum spectrometers (for x>1 kinematics).