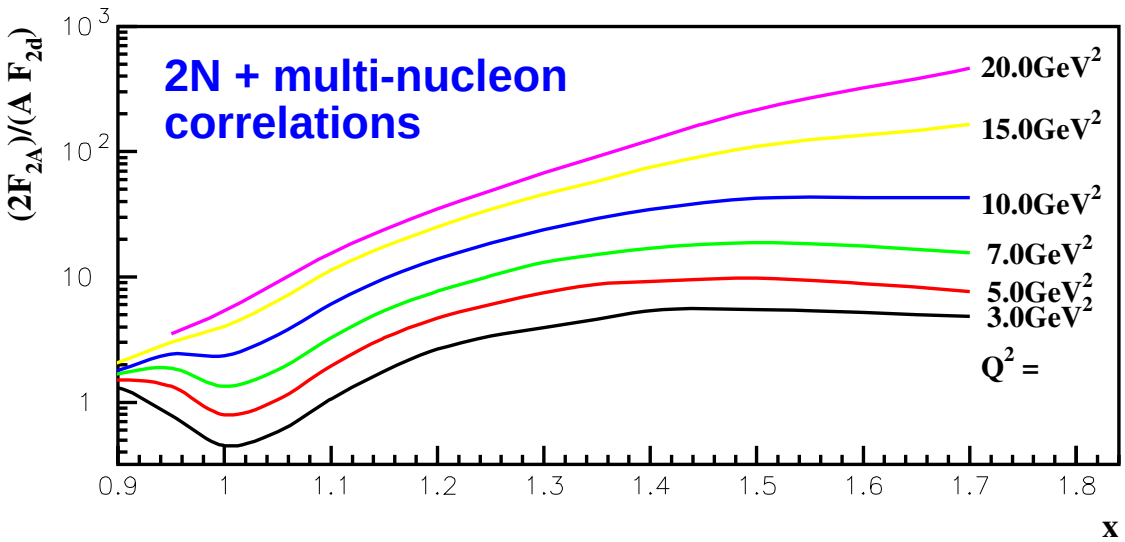
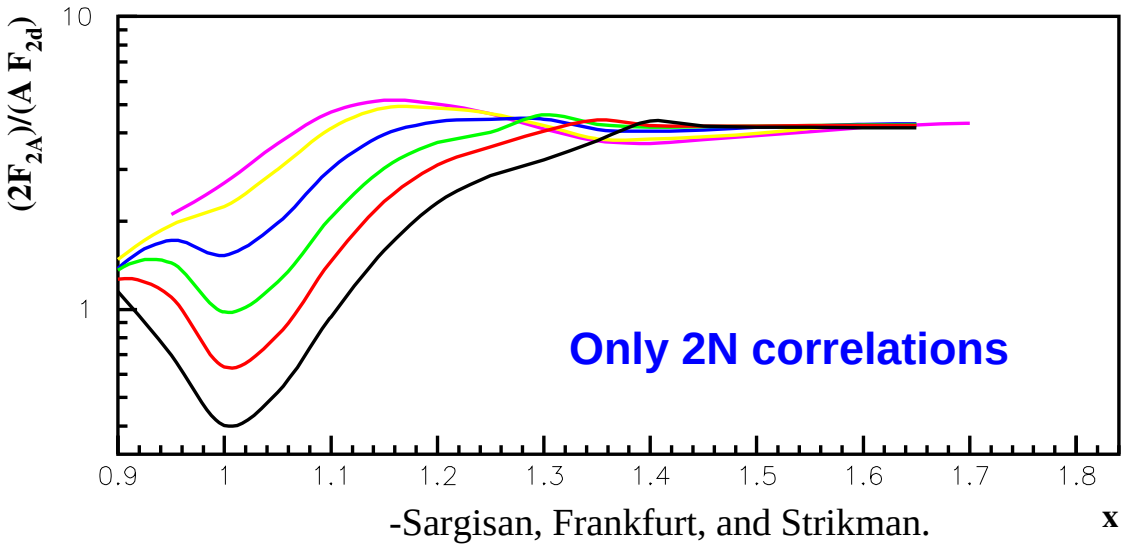
Q^2 dependence of A/D ratio

As Q^2 increases, evolution of the structure function will cause strength at x>2 (in heavy nuclei) to move to lower values of x, causing the ratio at x>1.5 to increase at high Q^2.





-Sargisan, Frankfurt, and Strikman.

Such an increase would be a nearly model independent indication of multi-nucleon correlations in nuclei.

While the multi-nucleon correlations in this model have to be scaled down to match the existing data, it predicts a factor of 100 increase in the ratio at large x and Q^2.