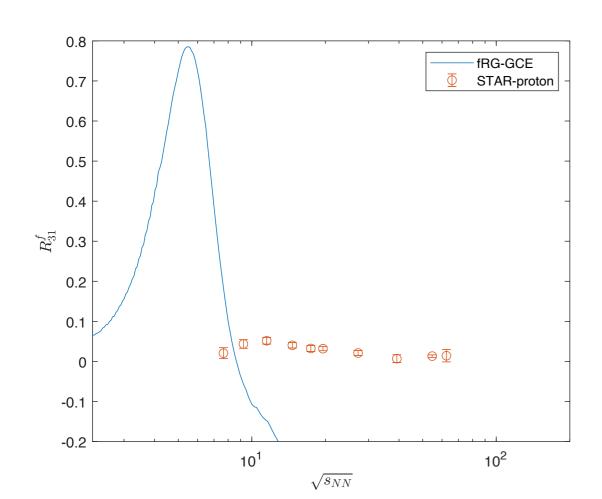
## The relation between factorial proton cumulants and proton cumulants

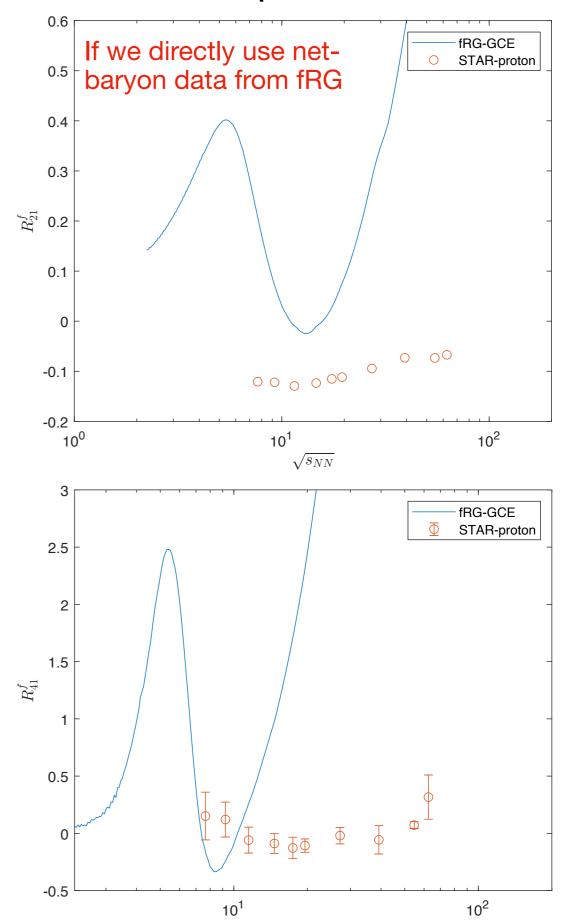
$$\kappa_1 = C_1$$

$$\kappa_2 = -C_1 + C_2$$

$$\kappa_3 = 2C_1 - 3C_2 + C_3$$

$$\kappa_4 = -6C_1 + 11C_2 - 6C_3 + C_4$$





 $\sqrt{s_{NN}}$ 

## $R_{21}^{fRG} - R_{21}^{HRG}$

