

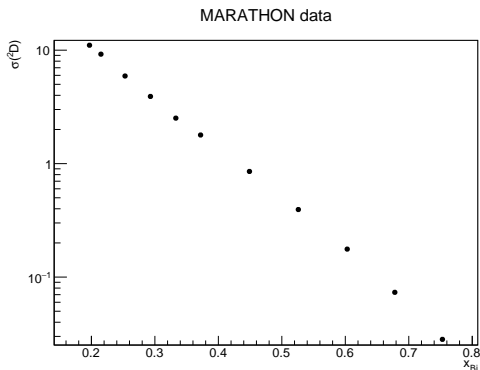
Iterative unfolding example: Part I

Tyler Kutz

November 29, 2018

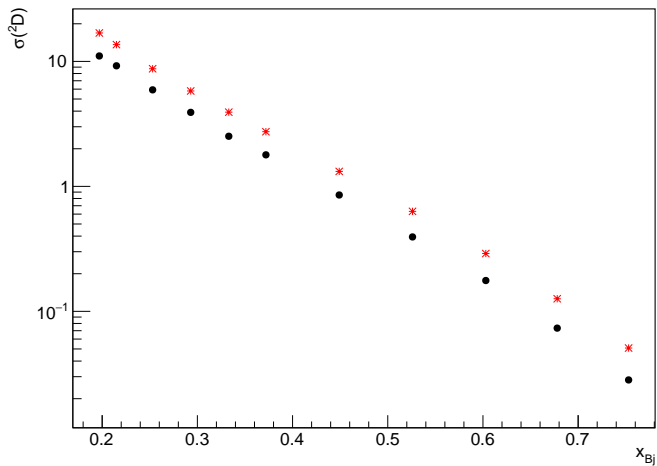
Experimental cross section

- Use deuterium cross section as an example
- Obtain radiated experimental cross section from MARATHON data
- Make *poorly motivated* assumption about acceptance to obtain cross section from normalized yield

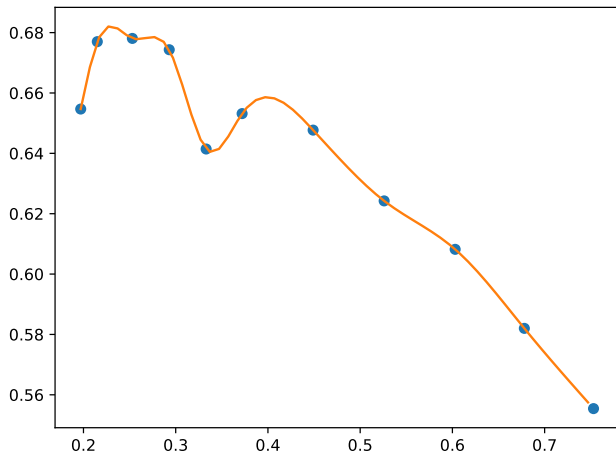


Iteration 0

Data (black points) vs. model (red stars)

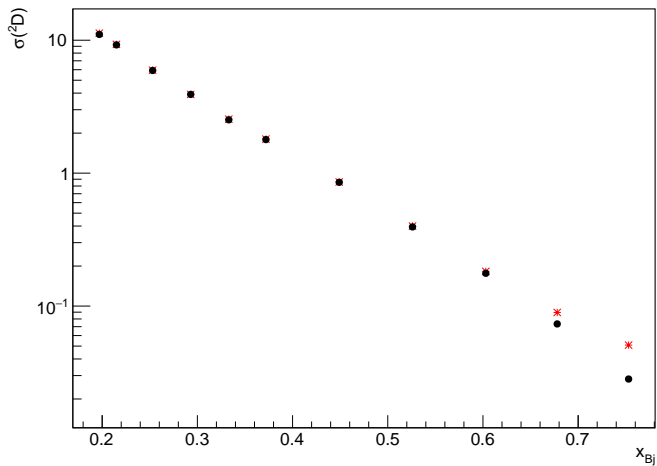


$f_1(x)$

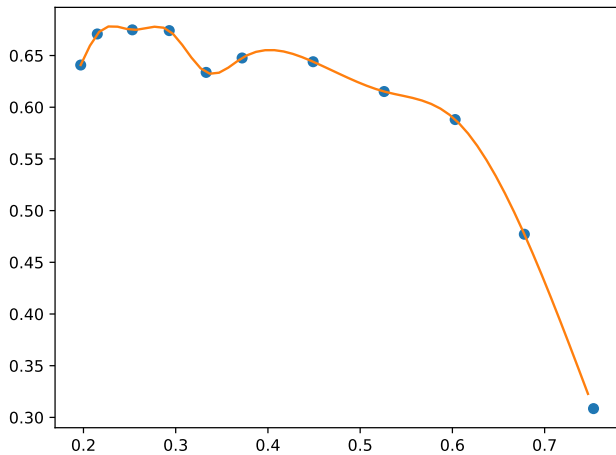


Iteration 1

Data (black points) vs. model (red stars)

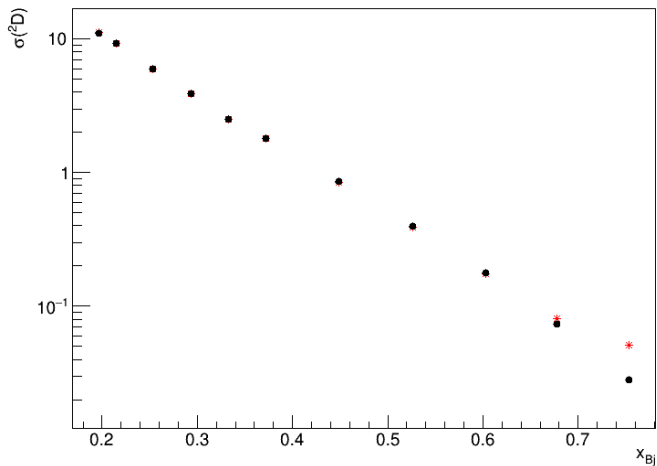


$f_2(x)$



Iteration 2

Data (black points) vs. model (red stars)



- Issue with convergence of last x_{Bj} point
- Need raw cross section (not ratio) to do iteration!
- What is the model dependence? (Bodek shown here)