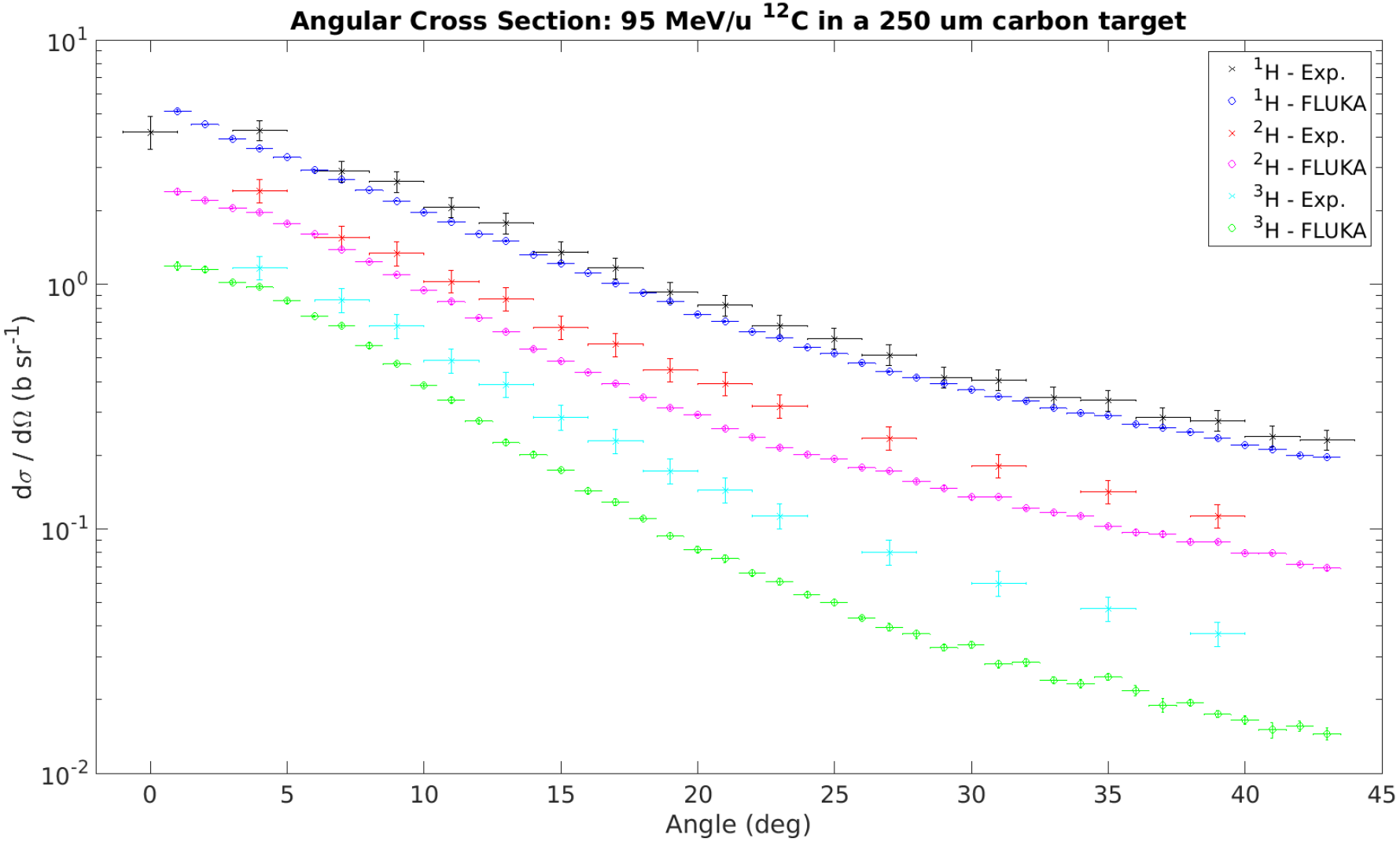
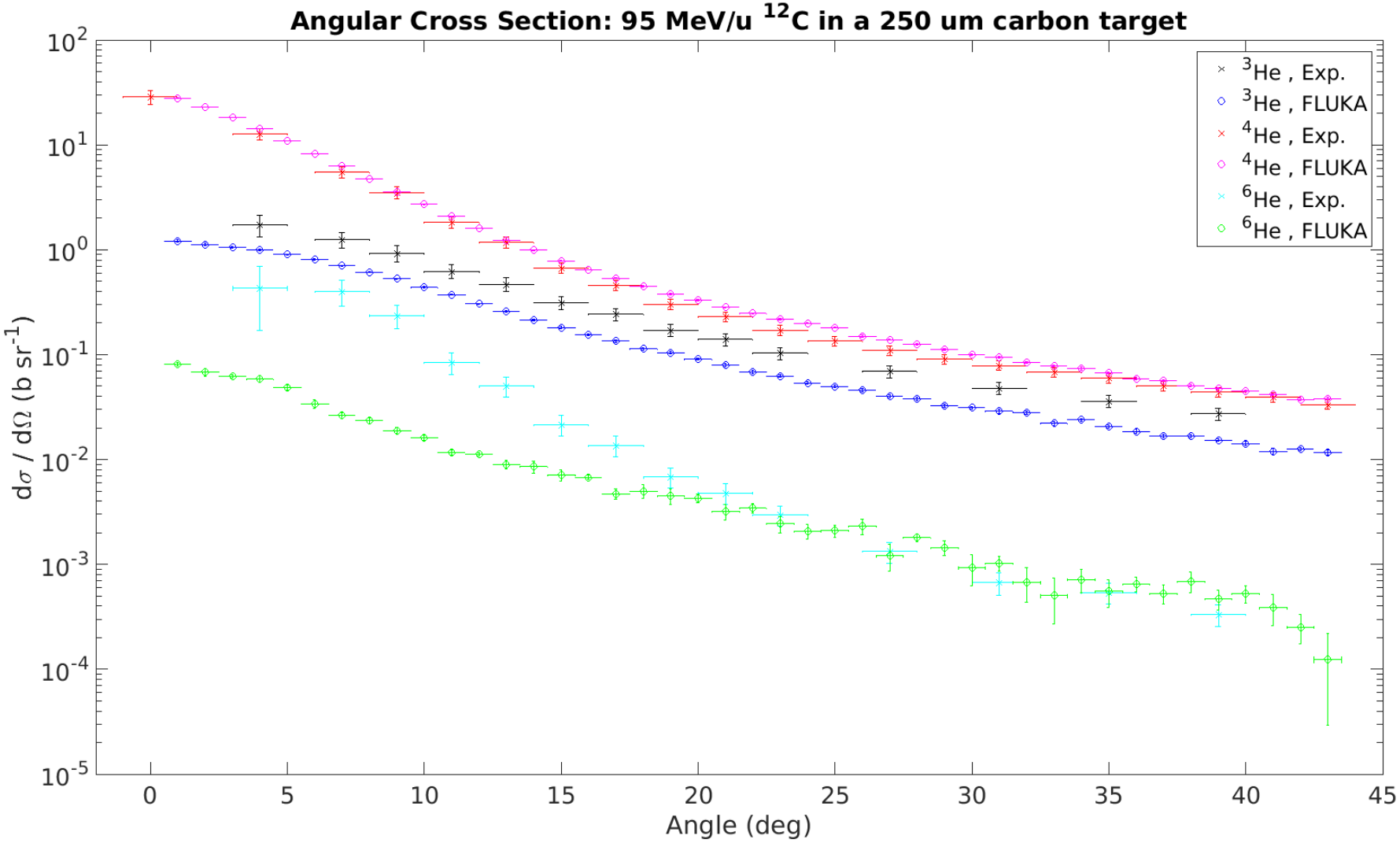
Something about the expected cross sections

GB SV ADC



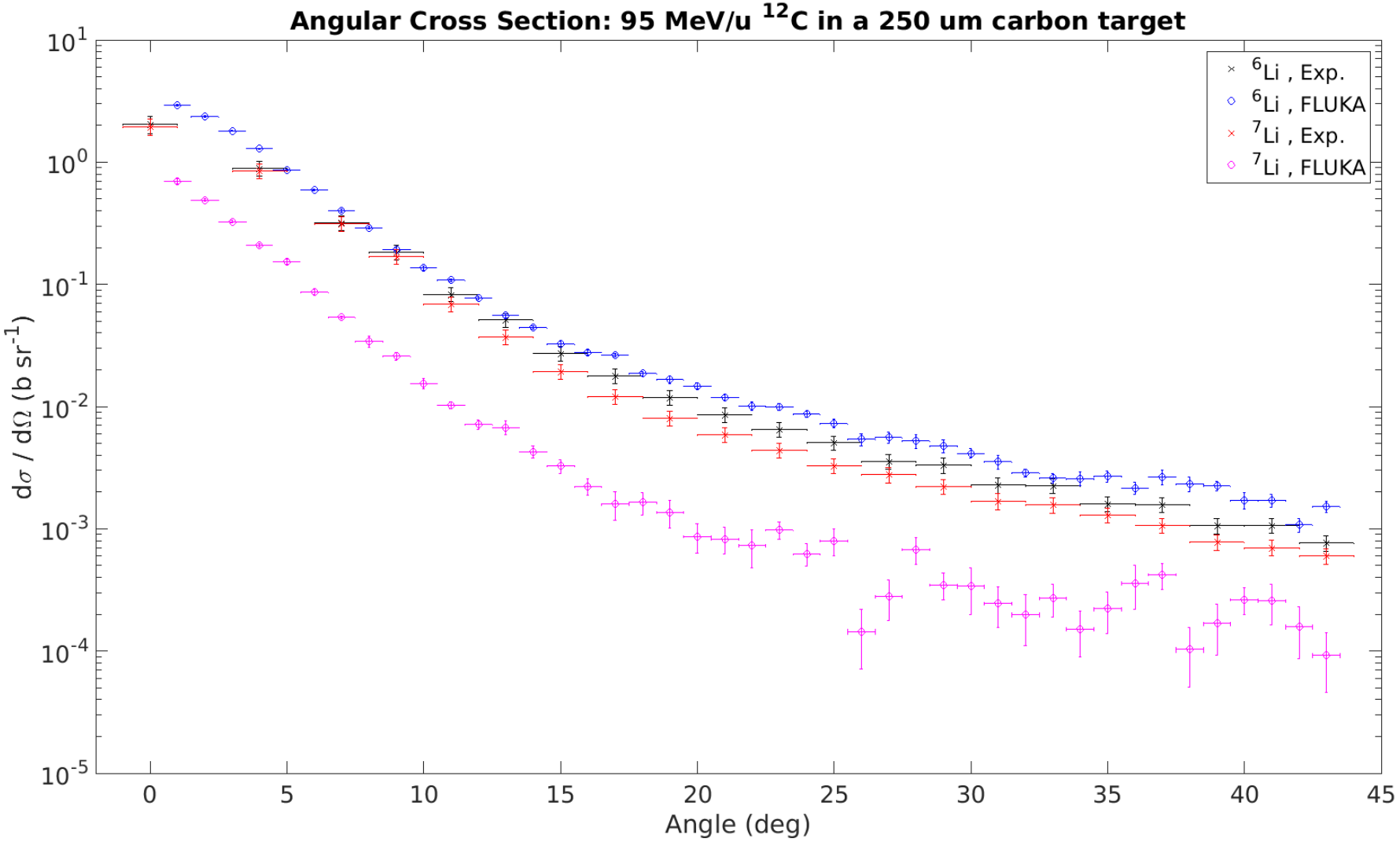
Fluka vs Exp

- ✓ Agreement for ^{1}H
- - Underestimation of ^{2}H
- - Underestimation of ^{3}H



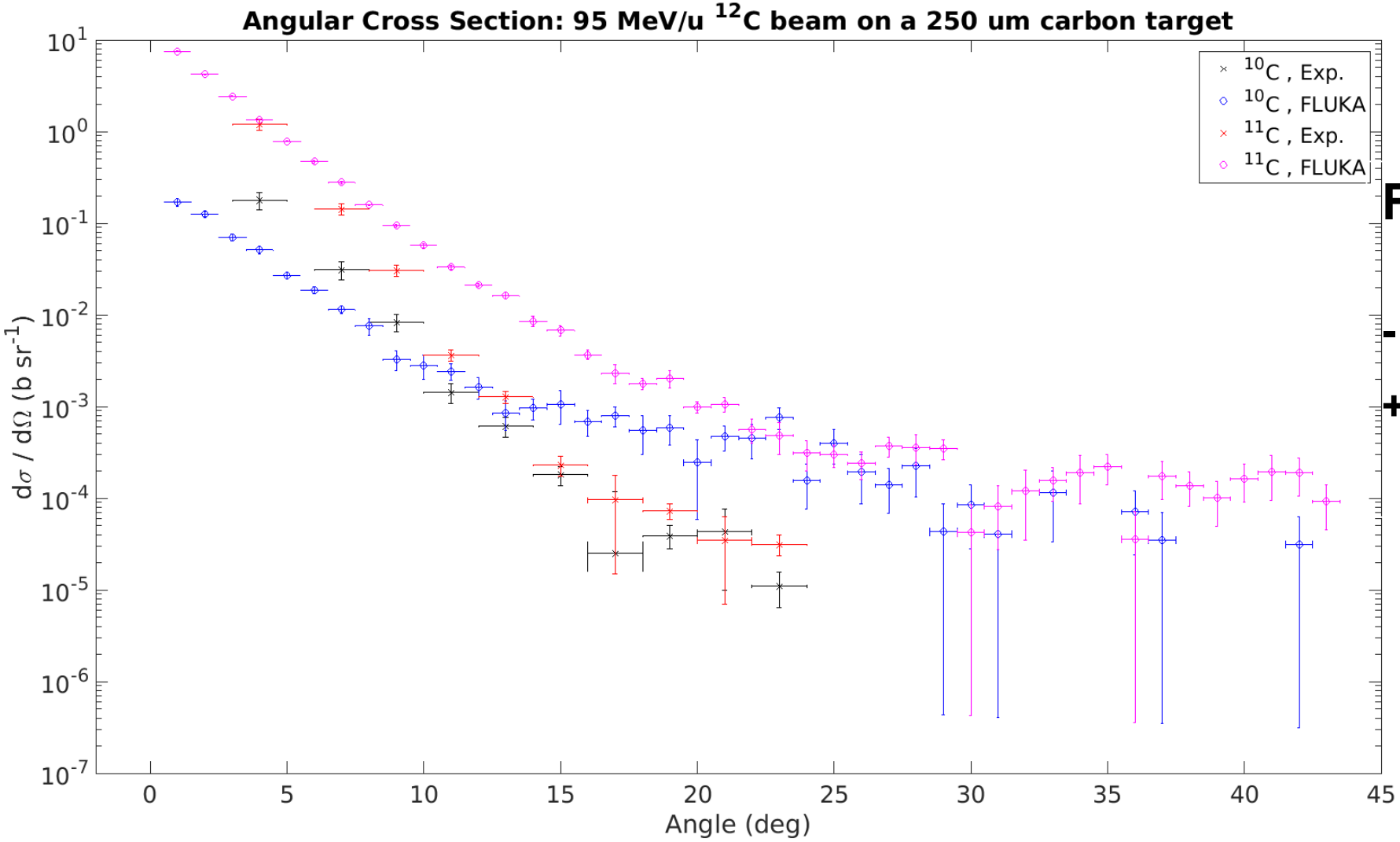
Fluka vs Exp

- Underestimation of ^{3}He
- ✓ Agreement for ^{4}He
- Underestimation of ^{6}He



Fluka vs Exp

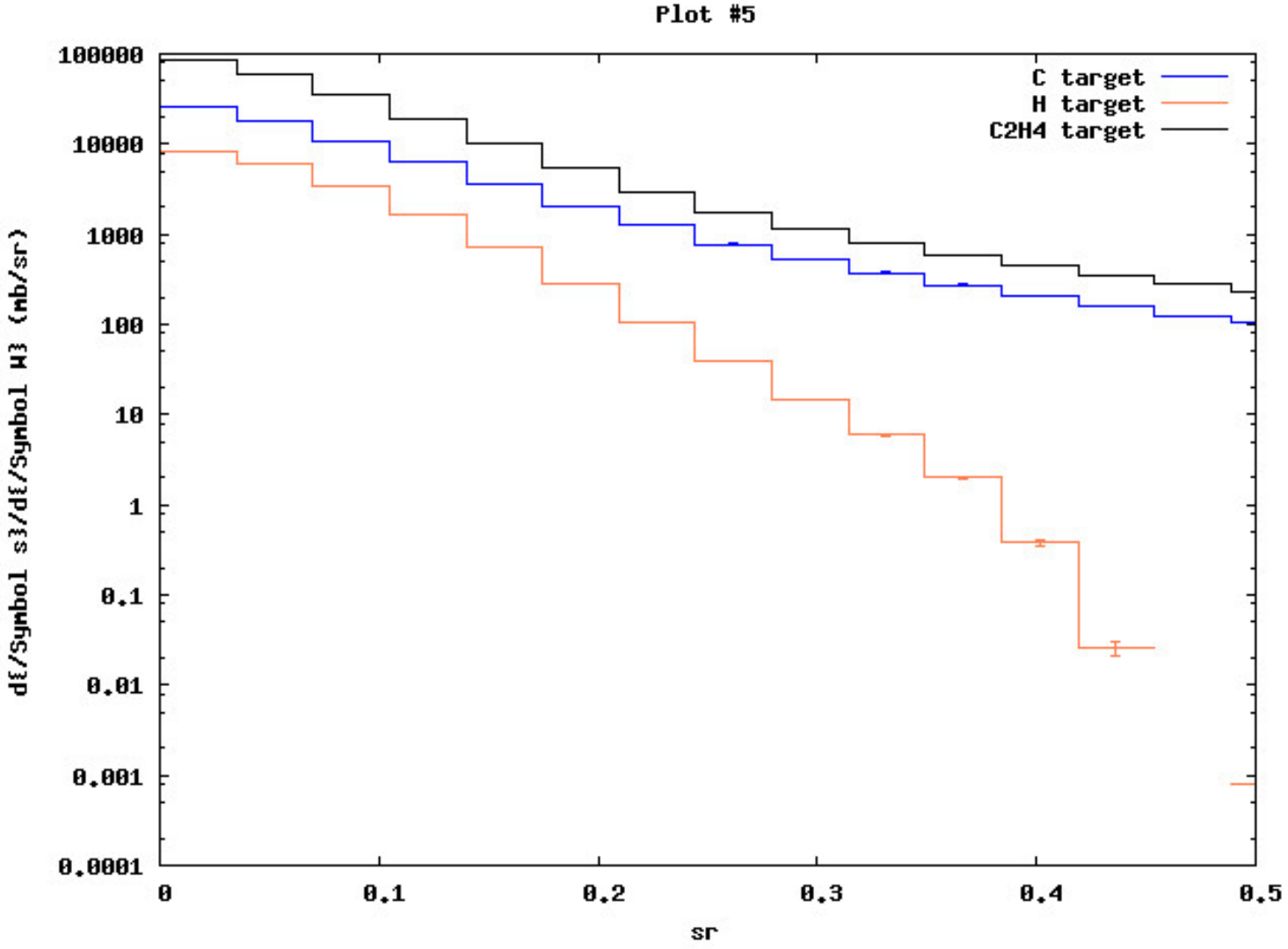
- ✓ Agreement for ^{6}Li
- \- Underestimation of ^{7}Li



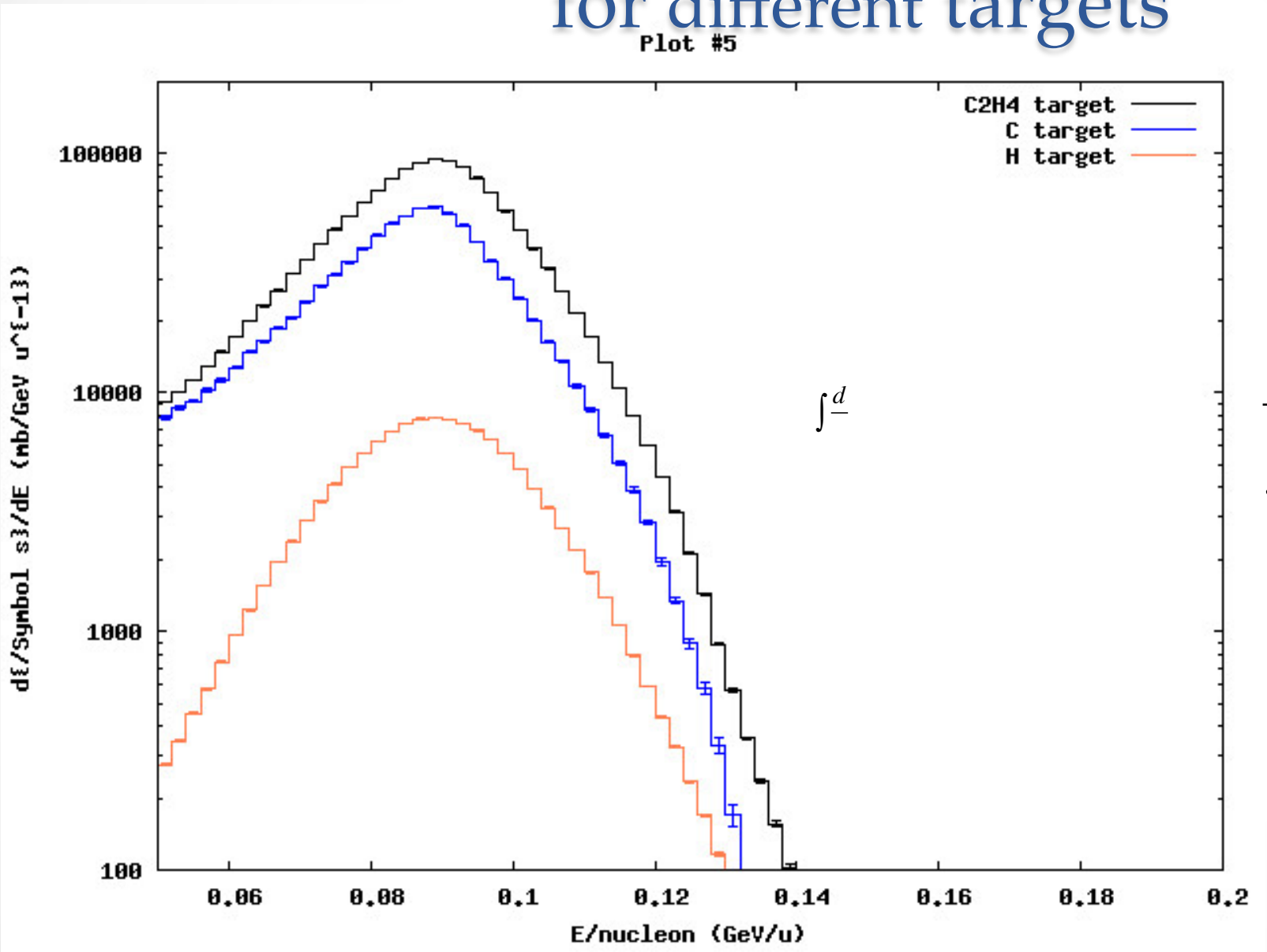
Fluka vs Exp

- \+ Under-Over for ^{10}C
- \+ Overestimation of ^{11}C

^{4}He: FLUKA prediction at 95 MeV/u for different targets

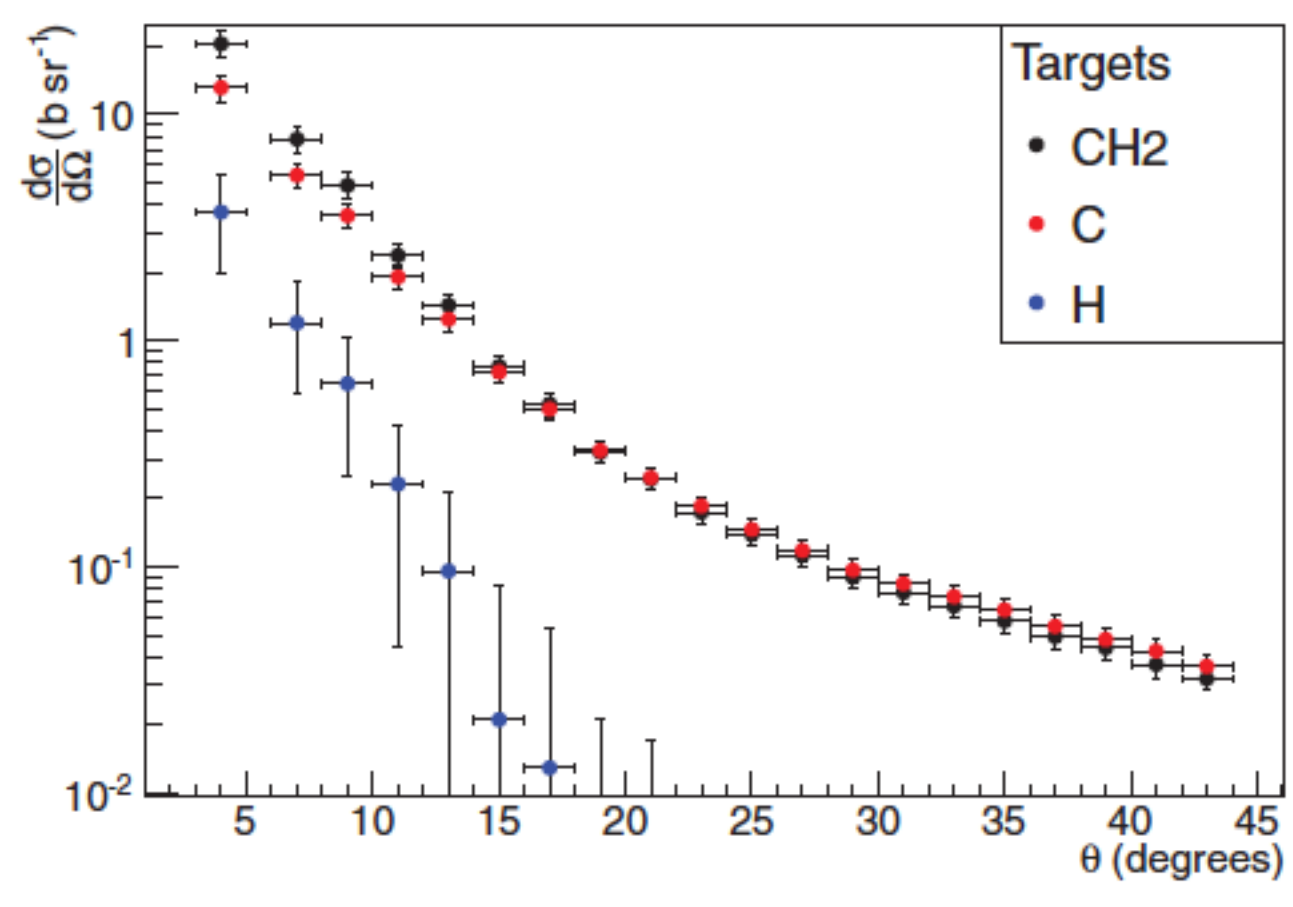


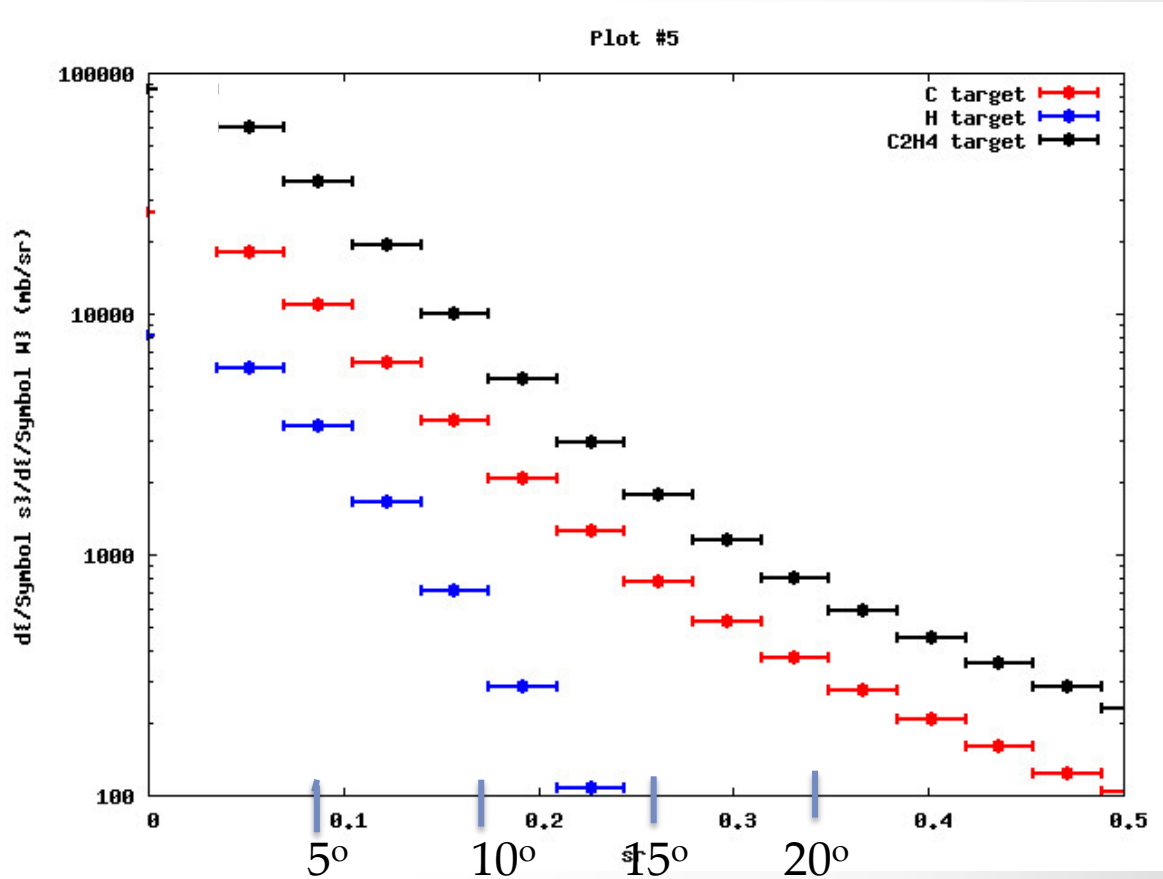
^{4}He: FLUKA prediction at 95 MeV/u for different targets



$$\int \frac{d\sigma(C \to {}^4He)}{dE} dE \Big|_H \Big/ \int \frac{d\sigma(C \to {}^4He)}{dE} dE \Big|_{C_2H_4} \sim 13.4$$

Ganil 95 MeV/u vs FLUKA 2017





In the FOOT simulation
^{12}C @200 MeV/u *(Antonia et al.)*