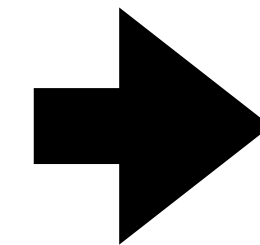


ACADEMIC JOURNEY

Kyle Lee

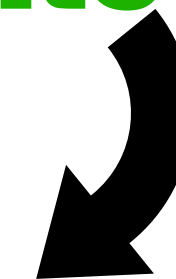


undergraduate

graduate



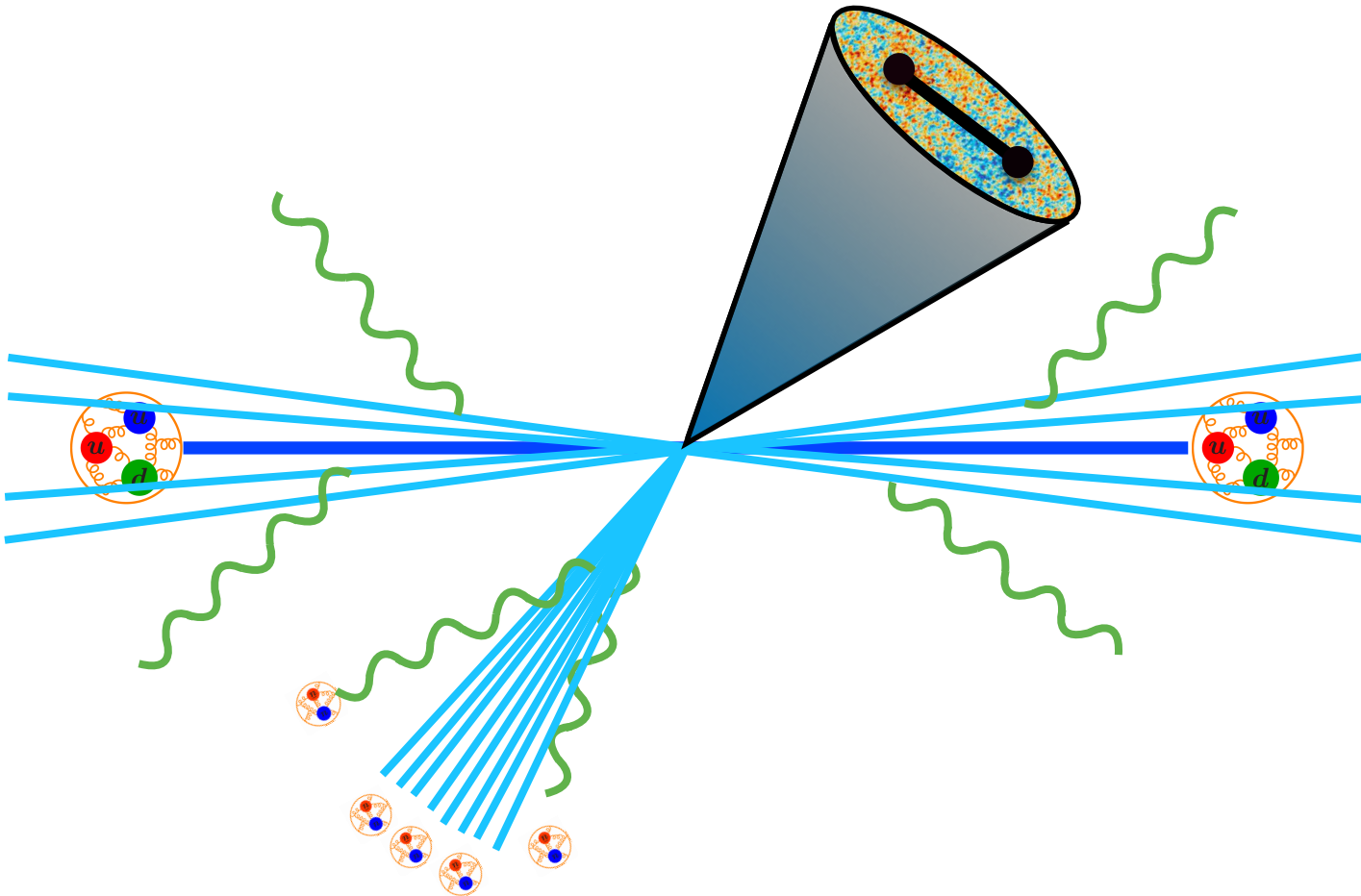
postdoc



RESEARCH INTERESTS

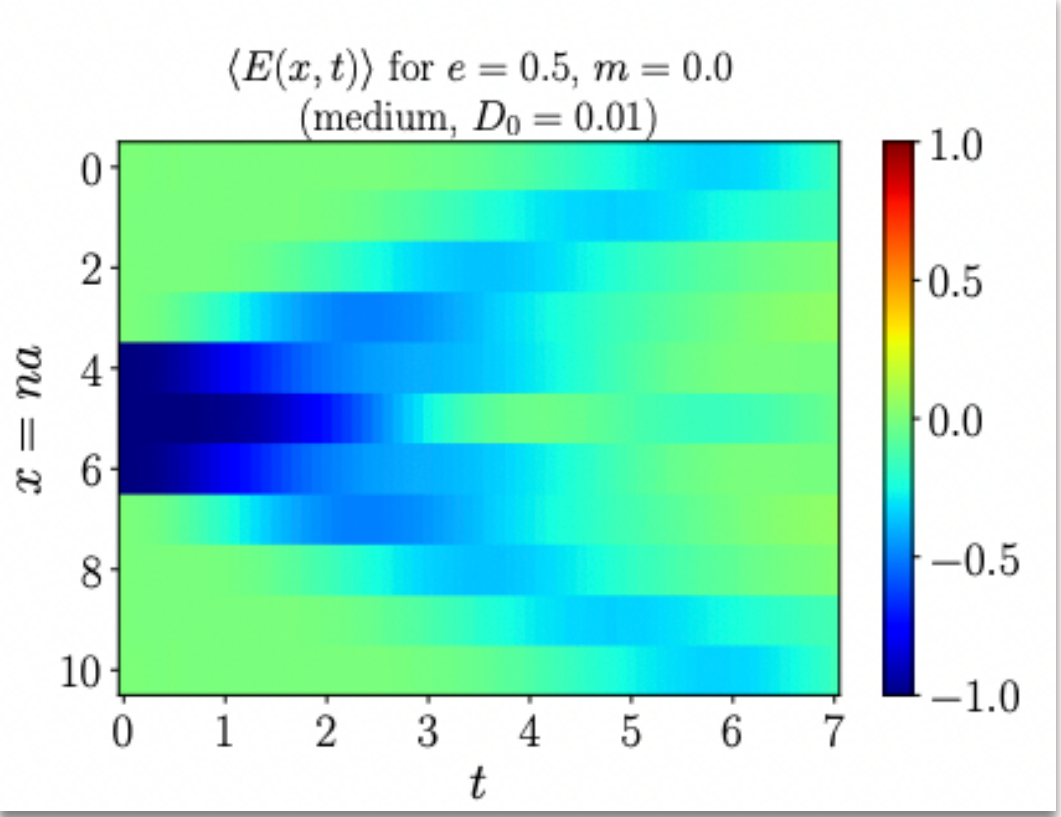
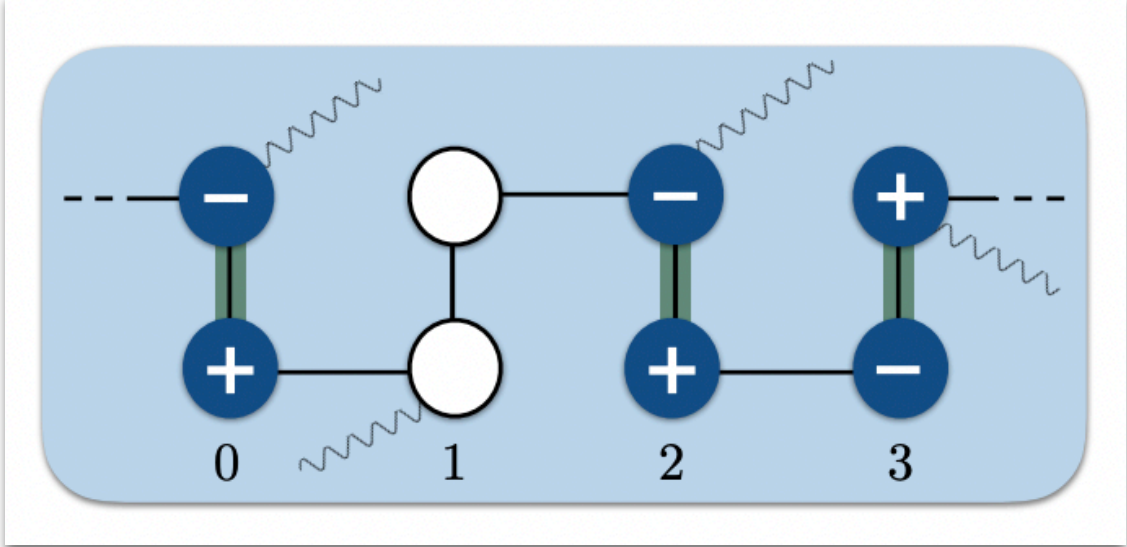
Kyle Lee

Jet and jet substructure



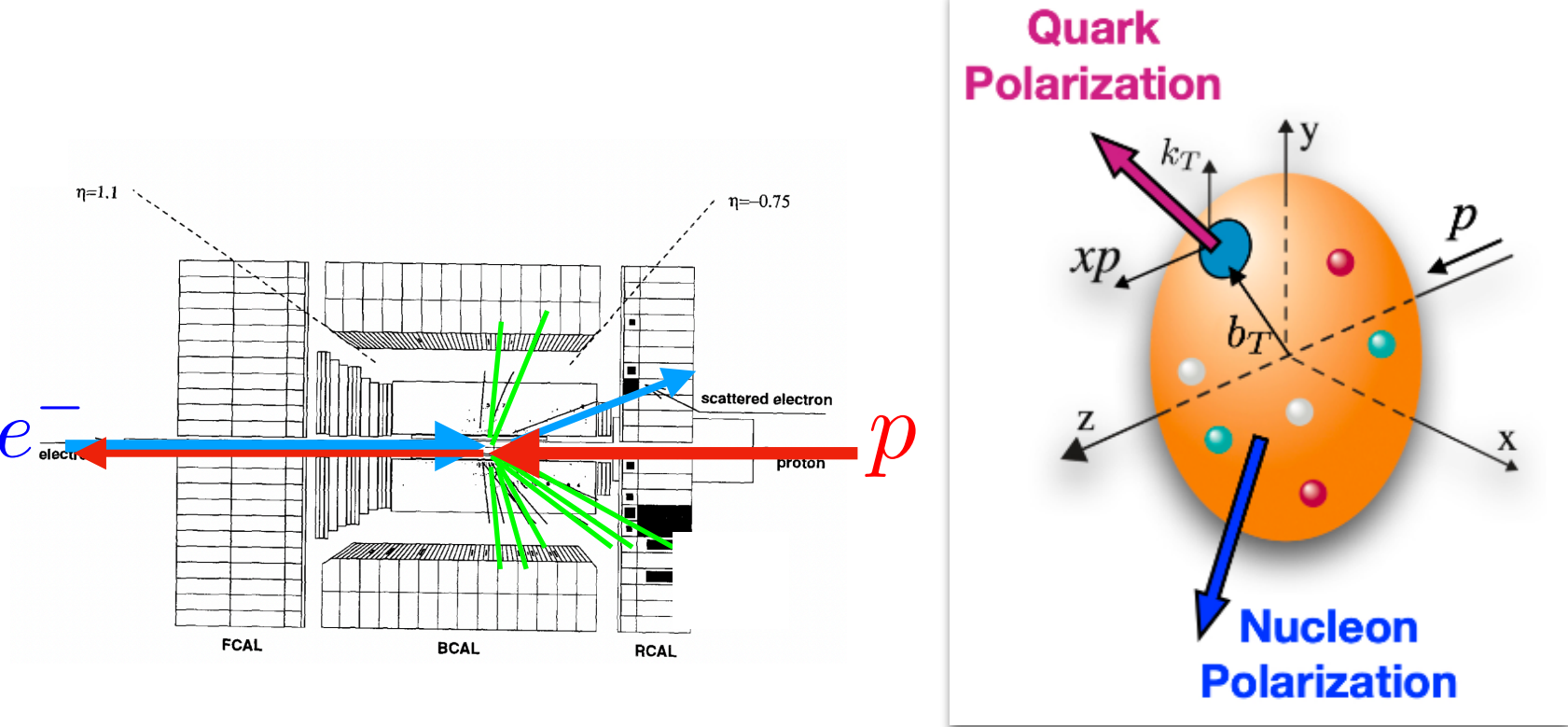
KL, Pathak, Stewart, Sun `24
 Kang, **KL**, Shao, Zhao `23
KL, Moutl `23
KL, Moutl, Ringer, Waalewijn `23
KL, Meçaj, Moutl `22
 Cal, **KL**, Ringer, Waalewijn `21
 Kang, **KL**, Zhao `20
 Aschenauer, **KL**, Page, Ringer `19
 ...
 ...
 ...

Quantum information and simulations



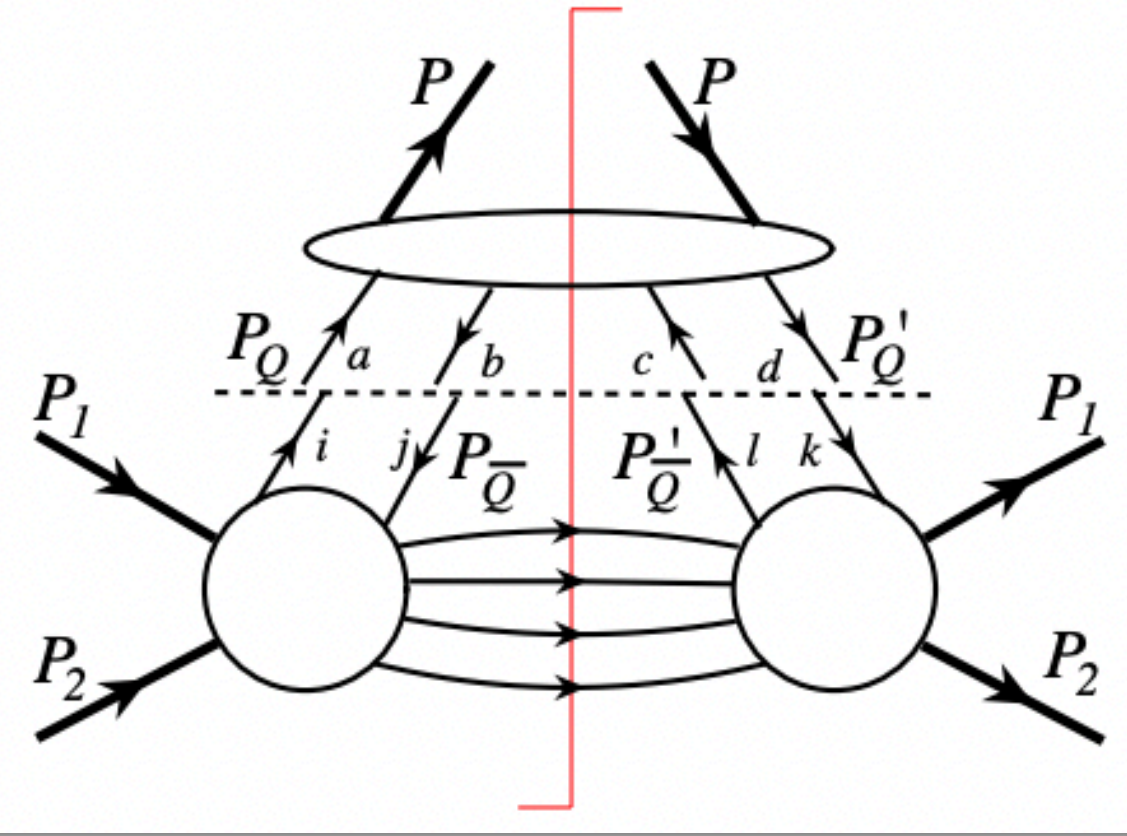
KL, Turro, Yao `24
KL, Mulligan, Ringer, Yao `23
 de Jong, **KL**, Mulligan, Płoskoń, Yao `21
 ...

Hadron tomography



KL, Schindler, Stewart `24
 Kang, **KL**, Shao, Zhao `23
 Kang, **KL**, Shao, Zhao `21
 Kang, **KL**, Shao, Terry `20
 Buffing, Kang, **KL**, Liu `18
 ...
 ...

Quarkonium physics



KL, Qiu, Sterman, Watanabe `24
KL, Qiu, Sterman, Watanabe `22
KL, Sterman `20
 ...

and more...

Assi, Hoeche, **KL**, Thaler `24
 von Kuk, **KL**, Michel, Sun `24
KL, Mulligan, Płoskoń, Ringer, Yuan `22
 Gao, **KL**, Mukherjee, Schubert, Zhao `21
 ...

RESEARCH INTERESTS

Kyle Lee

Jet and jet substructure

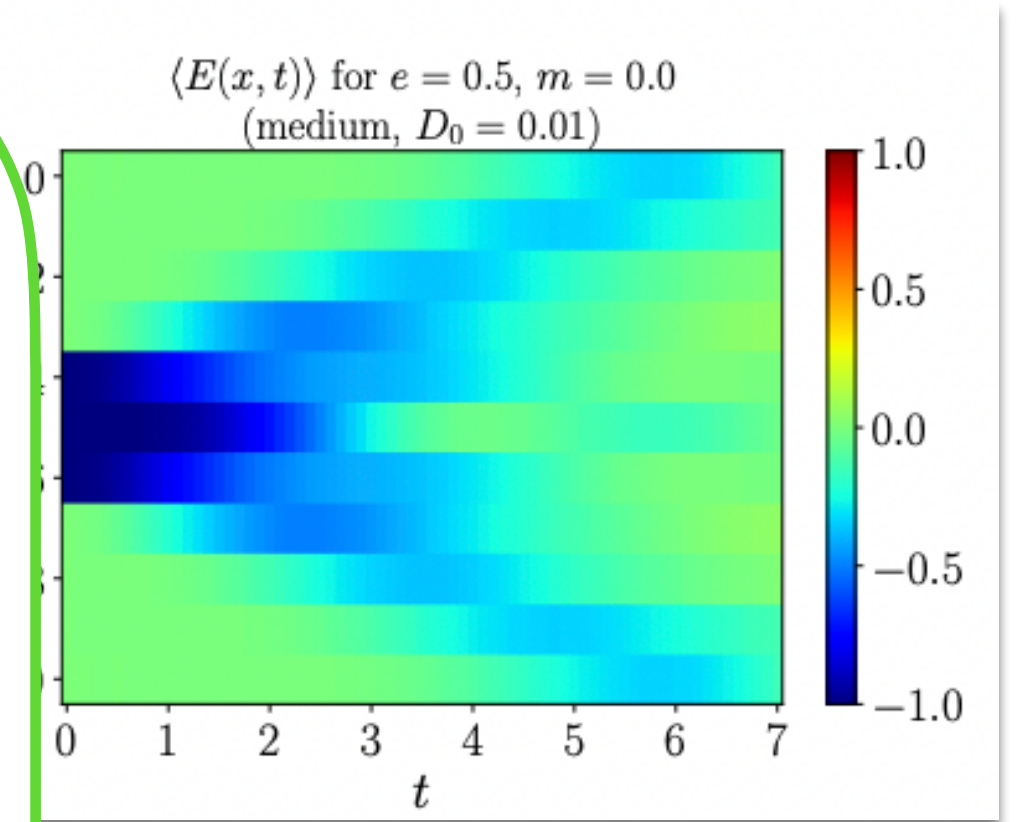
KL, Pathak, Stewart, Sun '24
Kang, KL, Shao, Zhao '23

Quantum information and simulations

KL, Turro, Yao '24
KL, Mulligan, Ringer, Yao '23
de Jong, KL, Mulligan, Płoskoń, Yao '21
...

My research and EIC physics

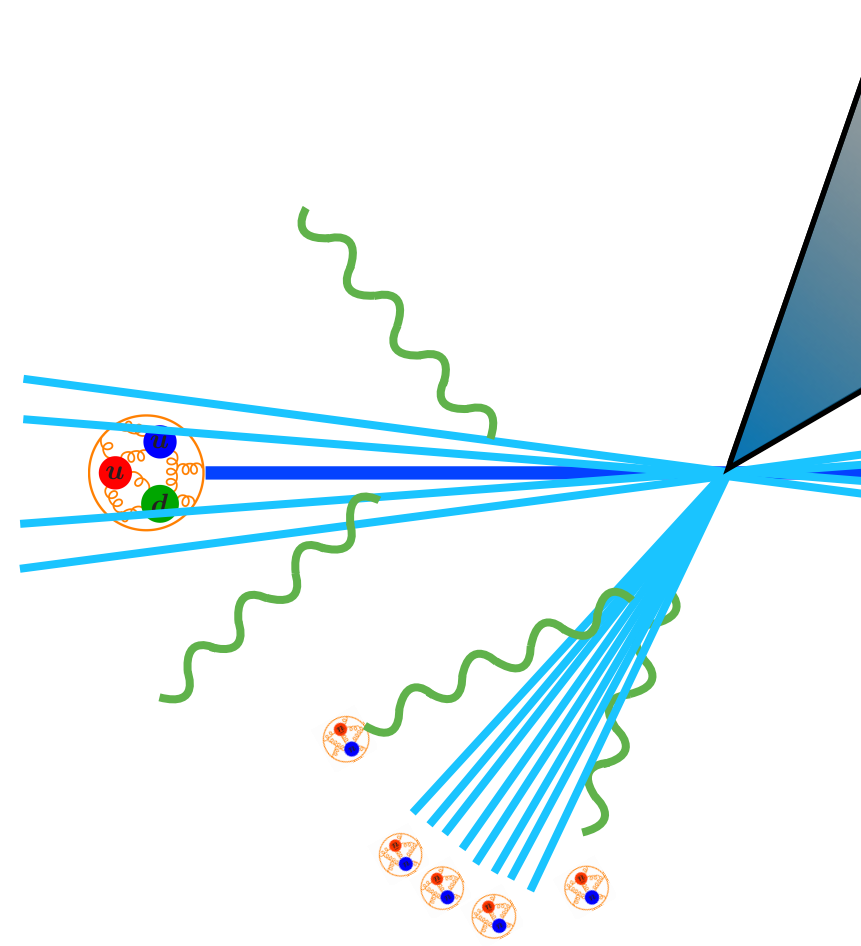
- Hadronic Structure: TMDs and Diffraction!
- Spin correlations between partons and hadrons
- Heavy quark dynamics and cold nuclear matter effects



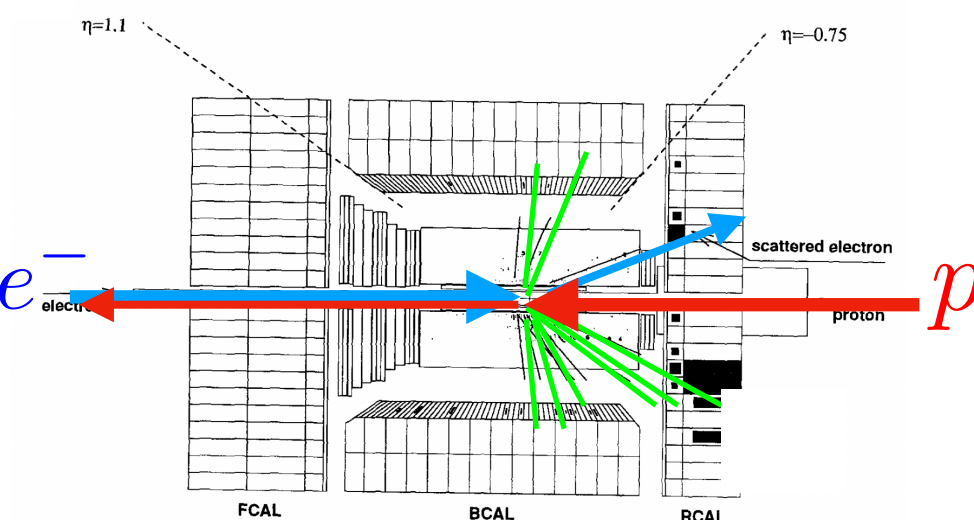
KL, Qiu, Sterman, Watanabe '24
KL, Qiu, Sterman, Watanabe '22
KL, Sterman '20
...

and more...

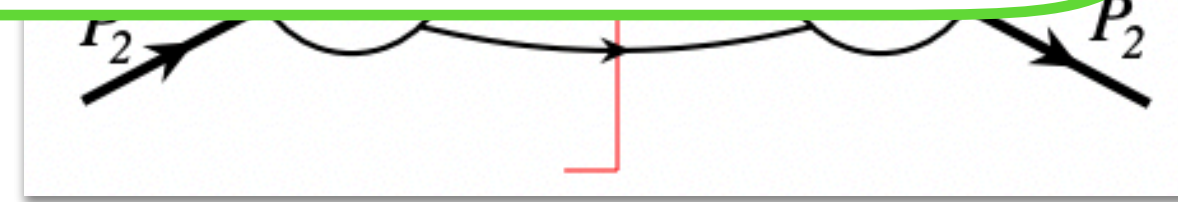
Assi, Hoeche, KL, Thaler '24
von Kuk, KL, Michel, Sun '24
KL, Mulligan, Płoskoń, Ringer, Yuan '22
Gao, KL, Mukherjee, Schubert, Zhao '21
...



Ha



Nucleon Polarization



RESEARCH INTERESTS

Kyle Lee

Jet and jet substructure

KL, Pathak, Stewart, Sun '24
Kang, KL, Shao, Zhao '23

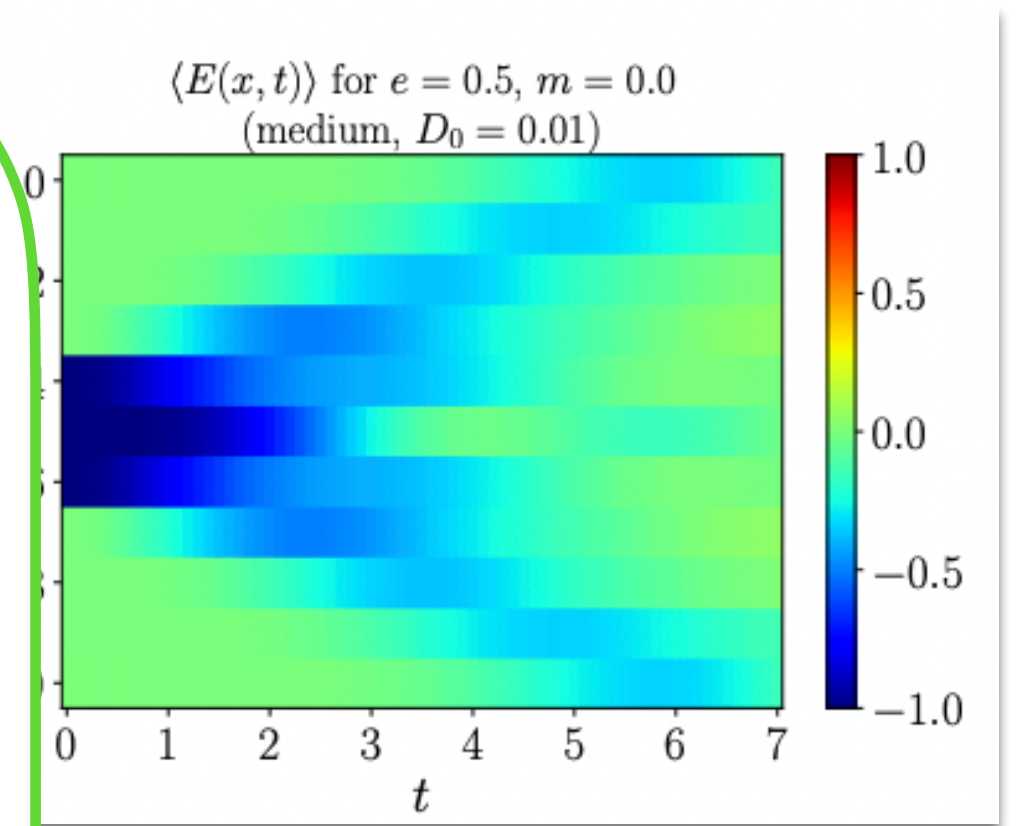
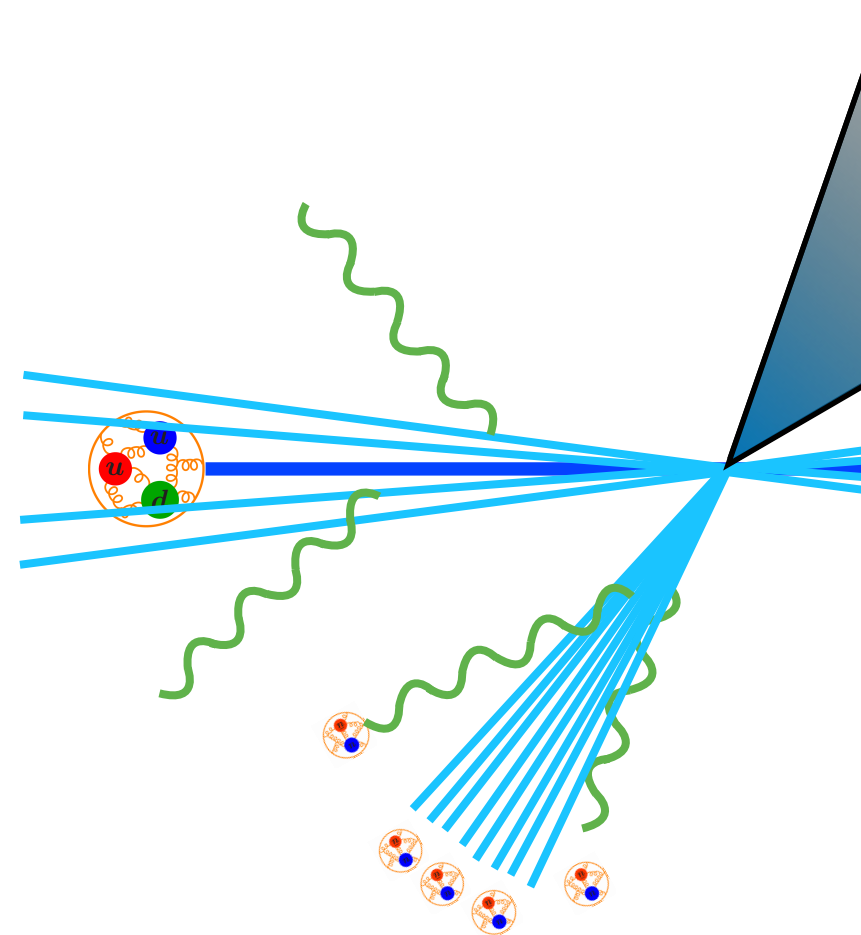
Quantum information and simulations

KL, Turro, Yao '24
KL, Mulligan, Ringer, Yao '23
de Jong, KL, Mulligan, Płoskoń, Yao '21
...

My research and EIC physics

- Hadronic Structure: TMDs and Diffraction!
- Spin correlations between partons and hadrons
- Heavy quark dynamics and cold nuclear matter effects

• Jets and jet substructure

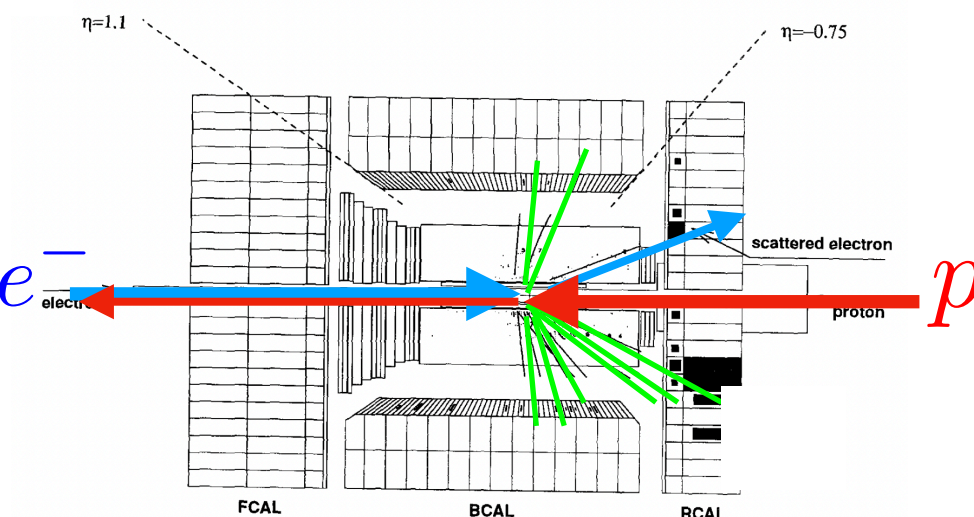


KL, Qiu, Sterman, Watanabe '24
KL, Qiu, Sterman, Watanabe '22
KL, Sterman '20
...

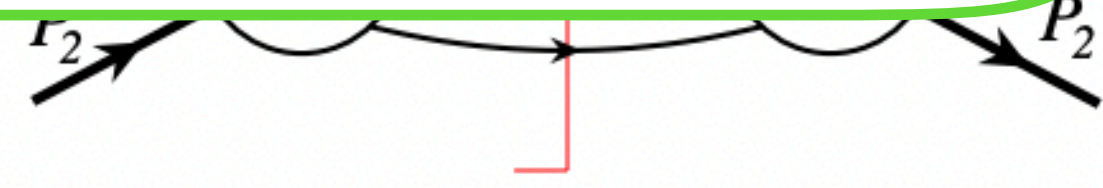
and more...

Assi, Hoeche, KL, Thaler '24
von Kuk, KL, Michel, Sun '24
KL, Mulligan, Płoskoń, Ringer, Yuan '22
Gao, KL, Mukherjee, Schubert, Zhao '21
...

Ha



Nucleon
Polarization



EXPERIMENTS MEET THEORY

Kyle Lee

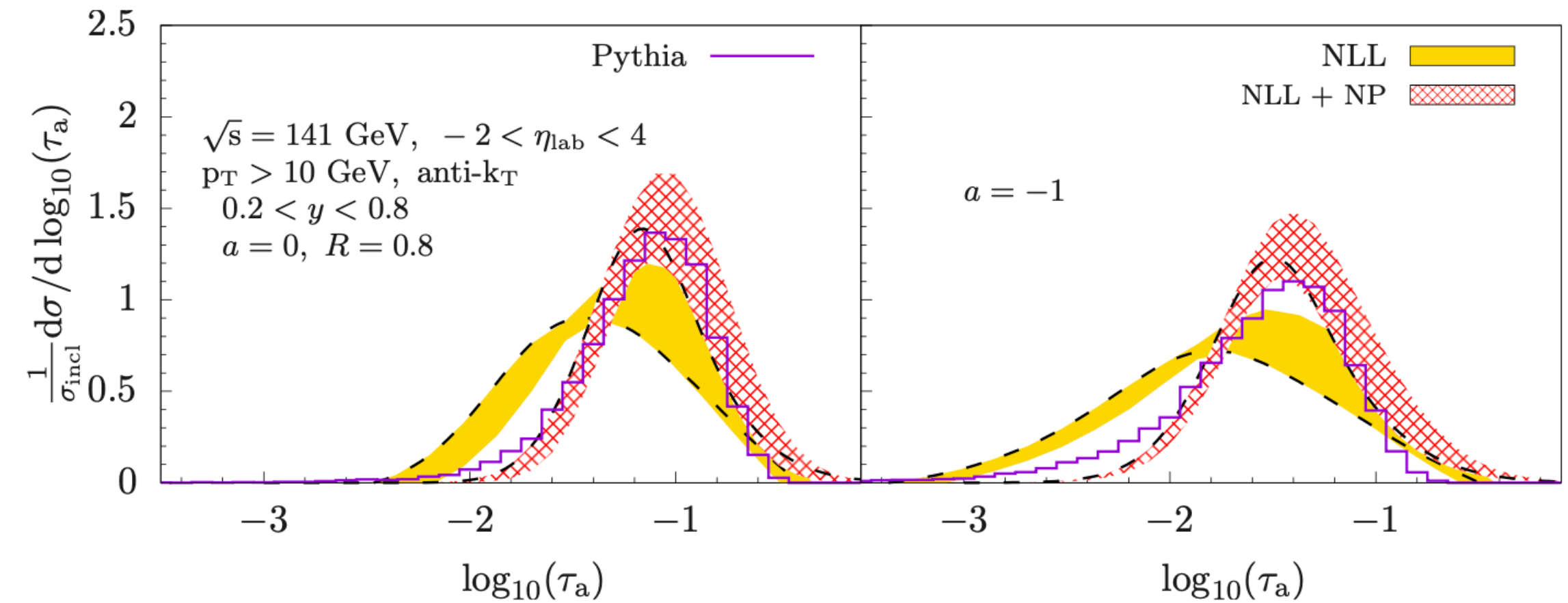
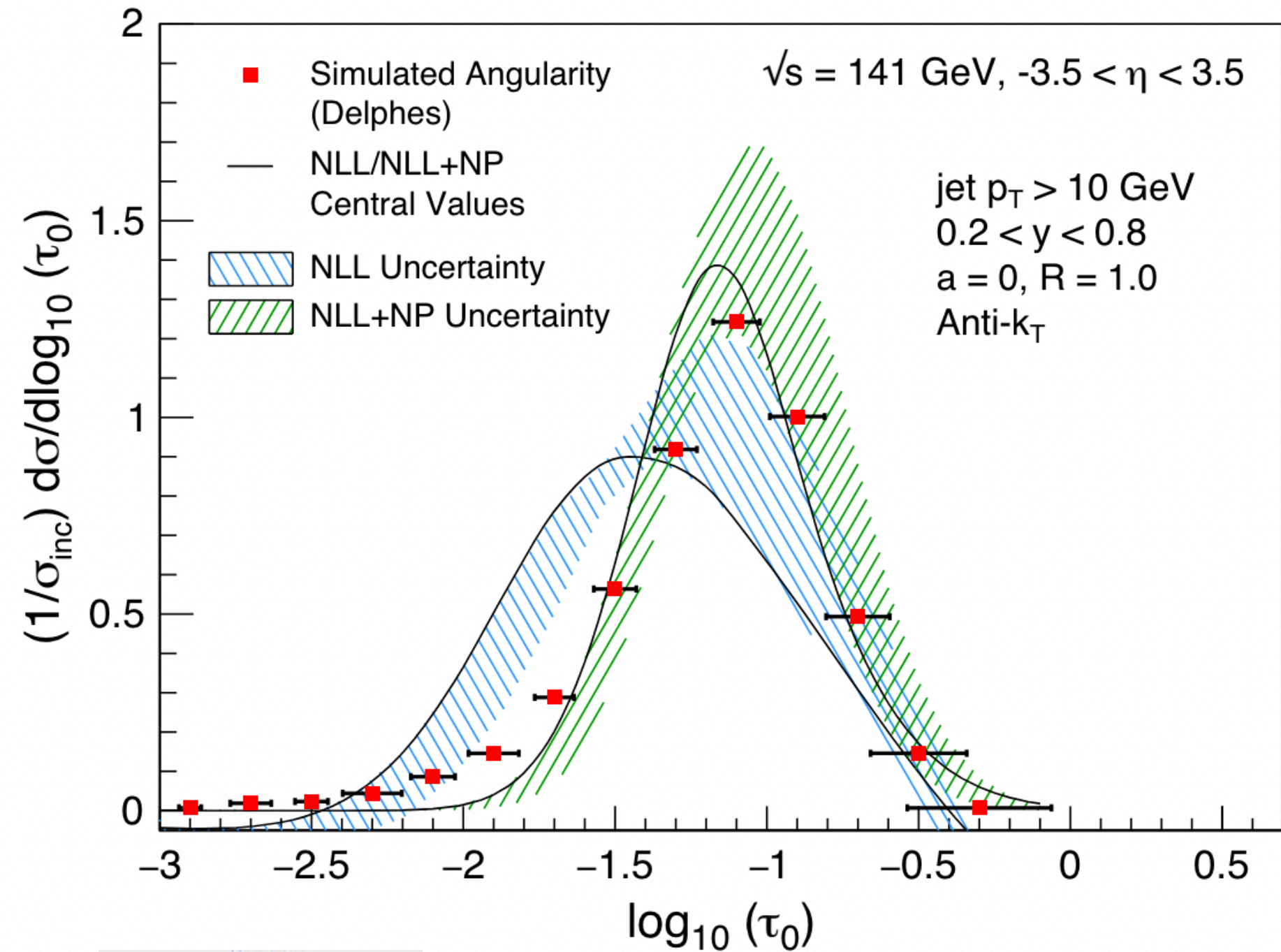
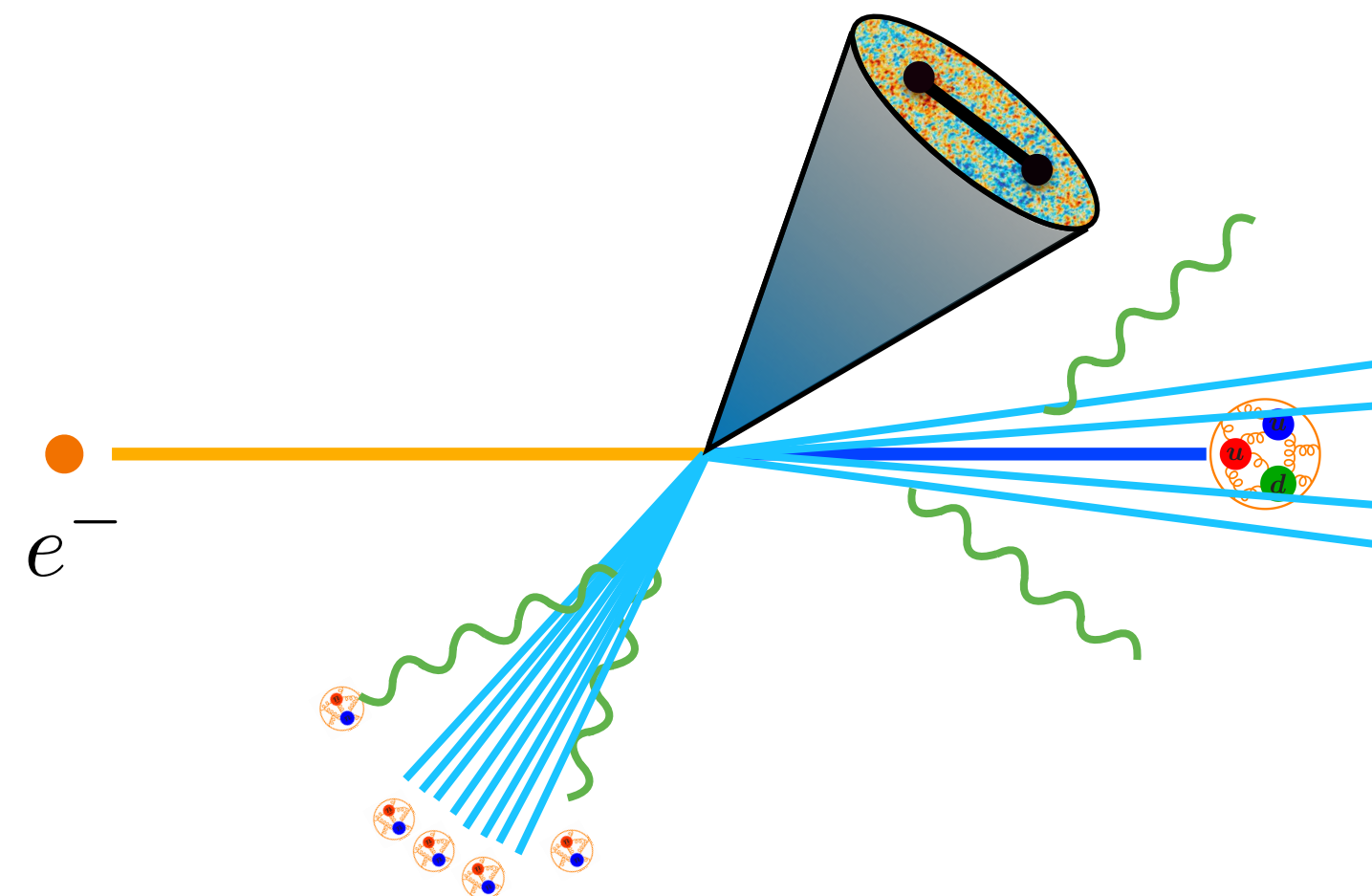
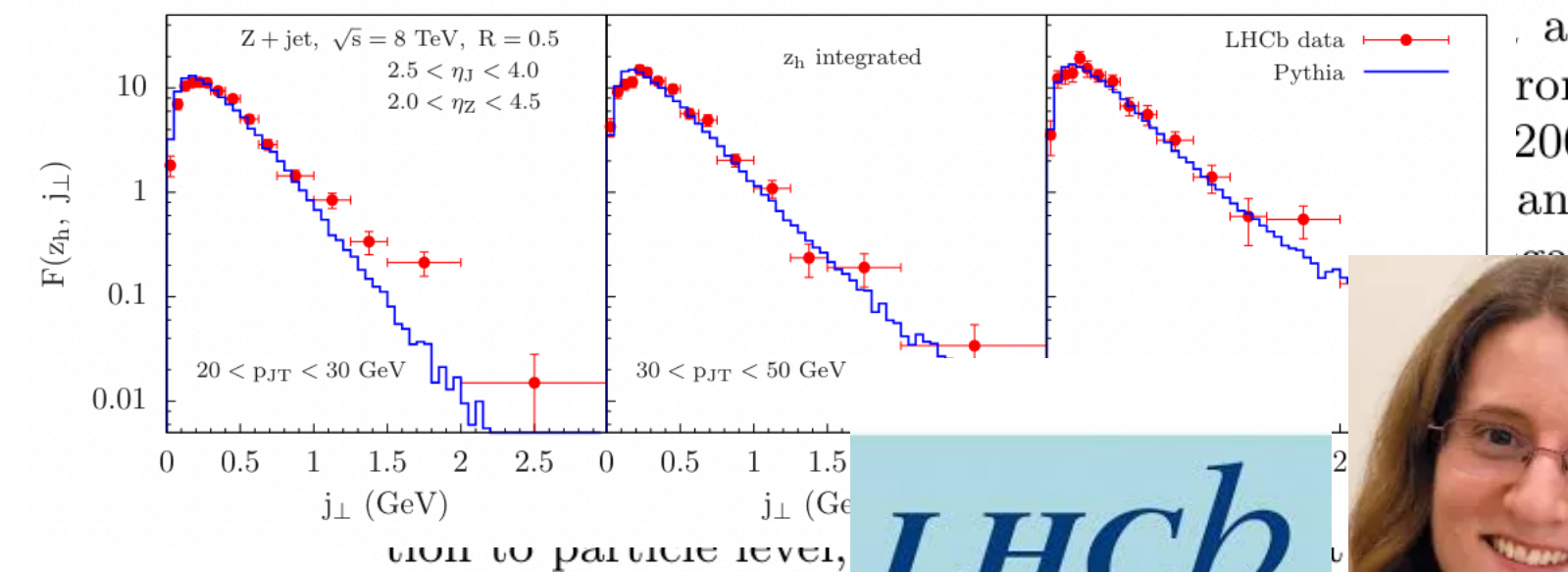
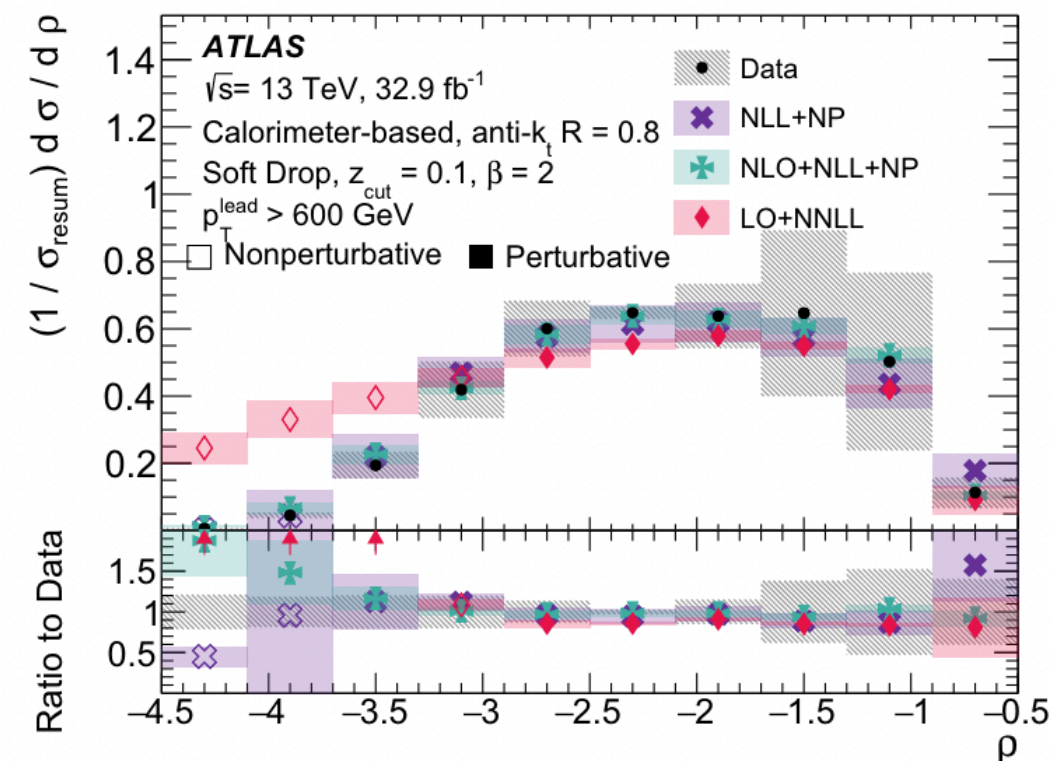
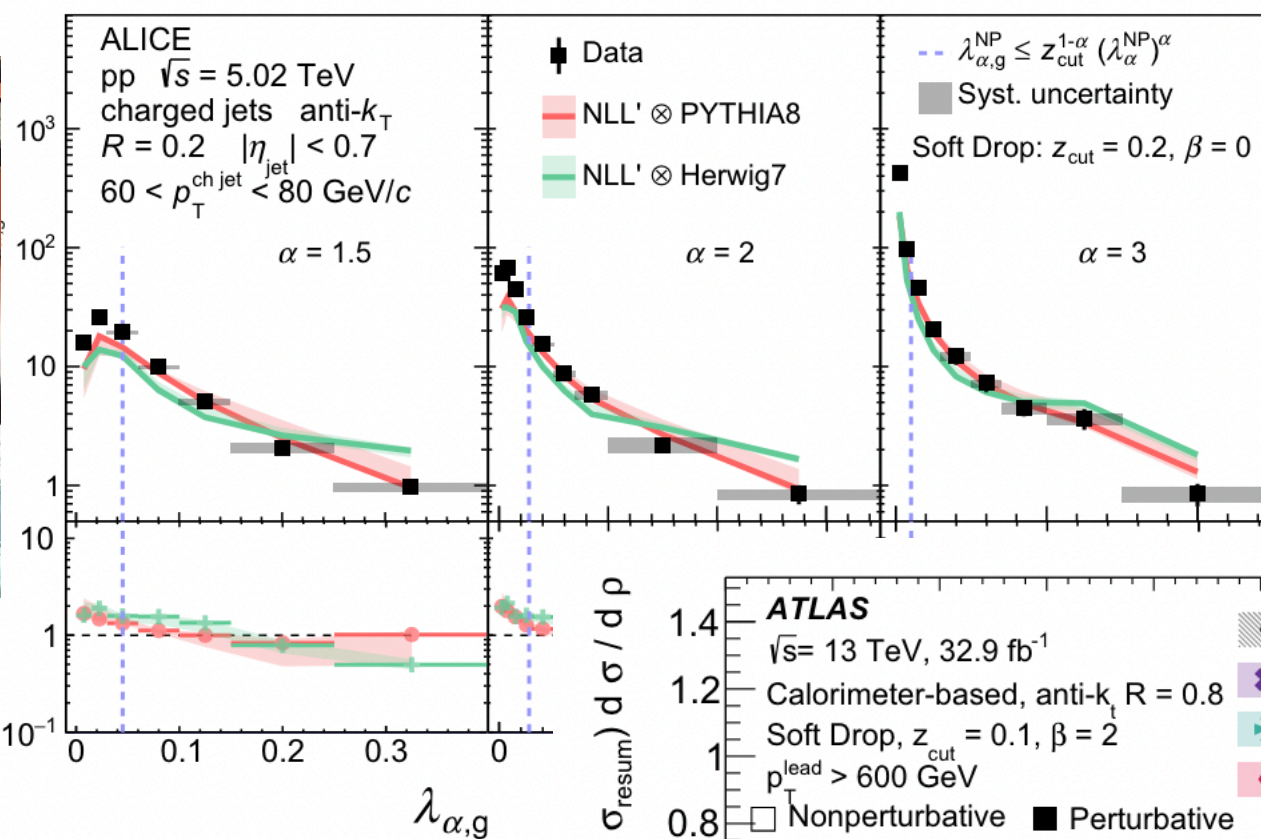
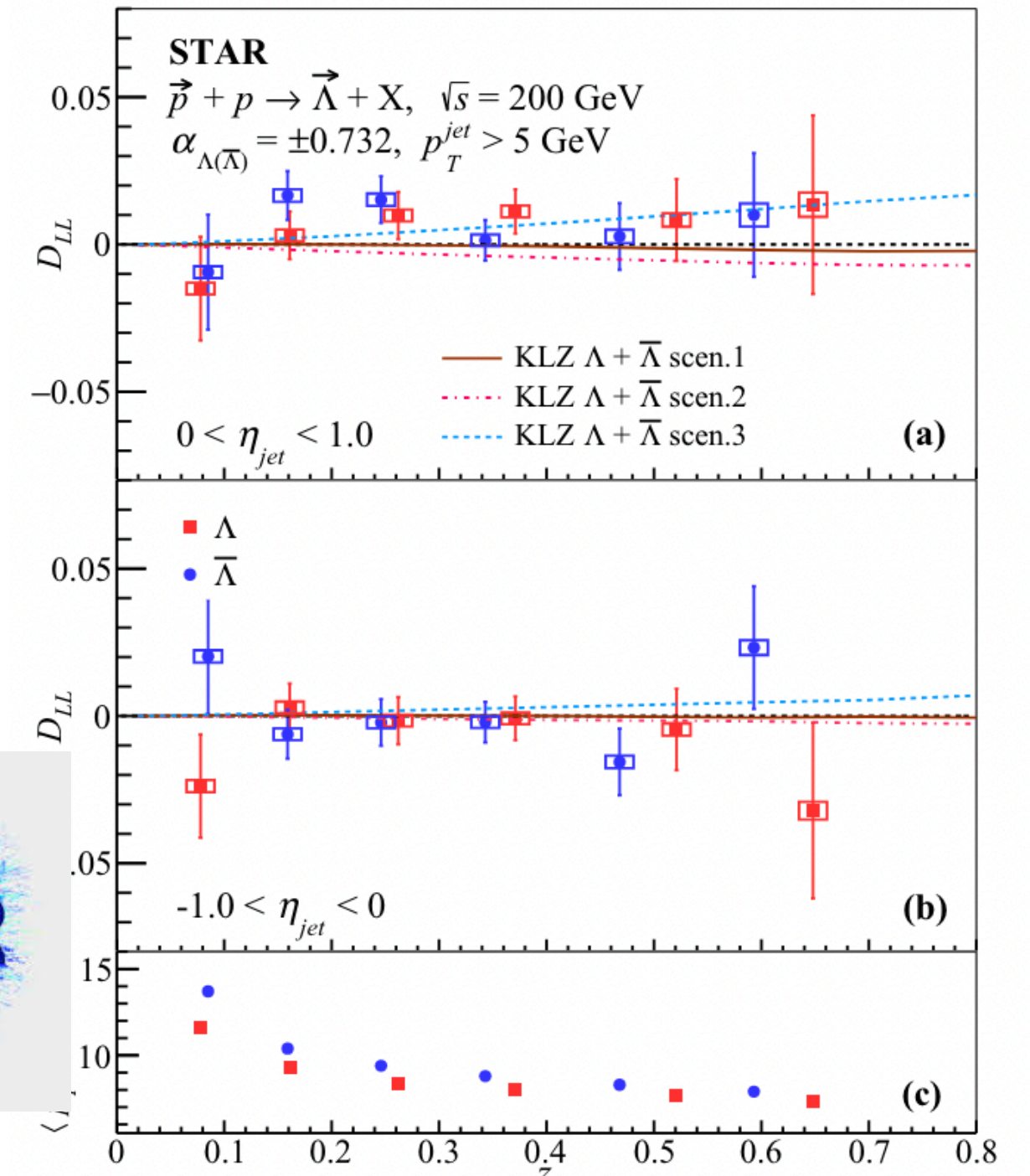
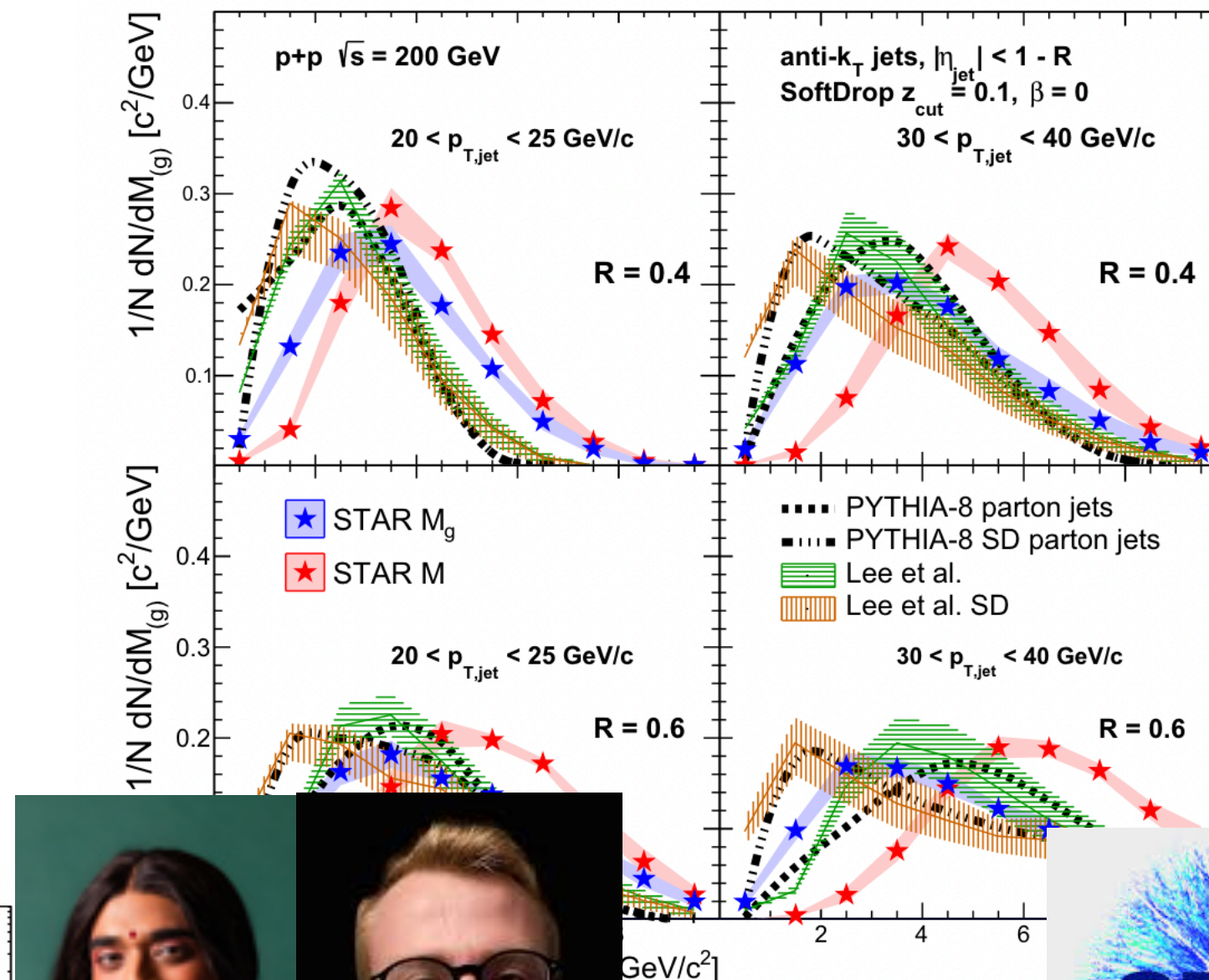
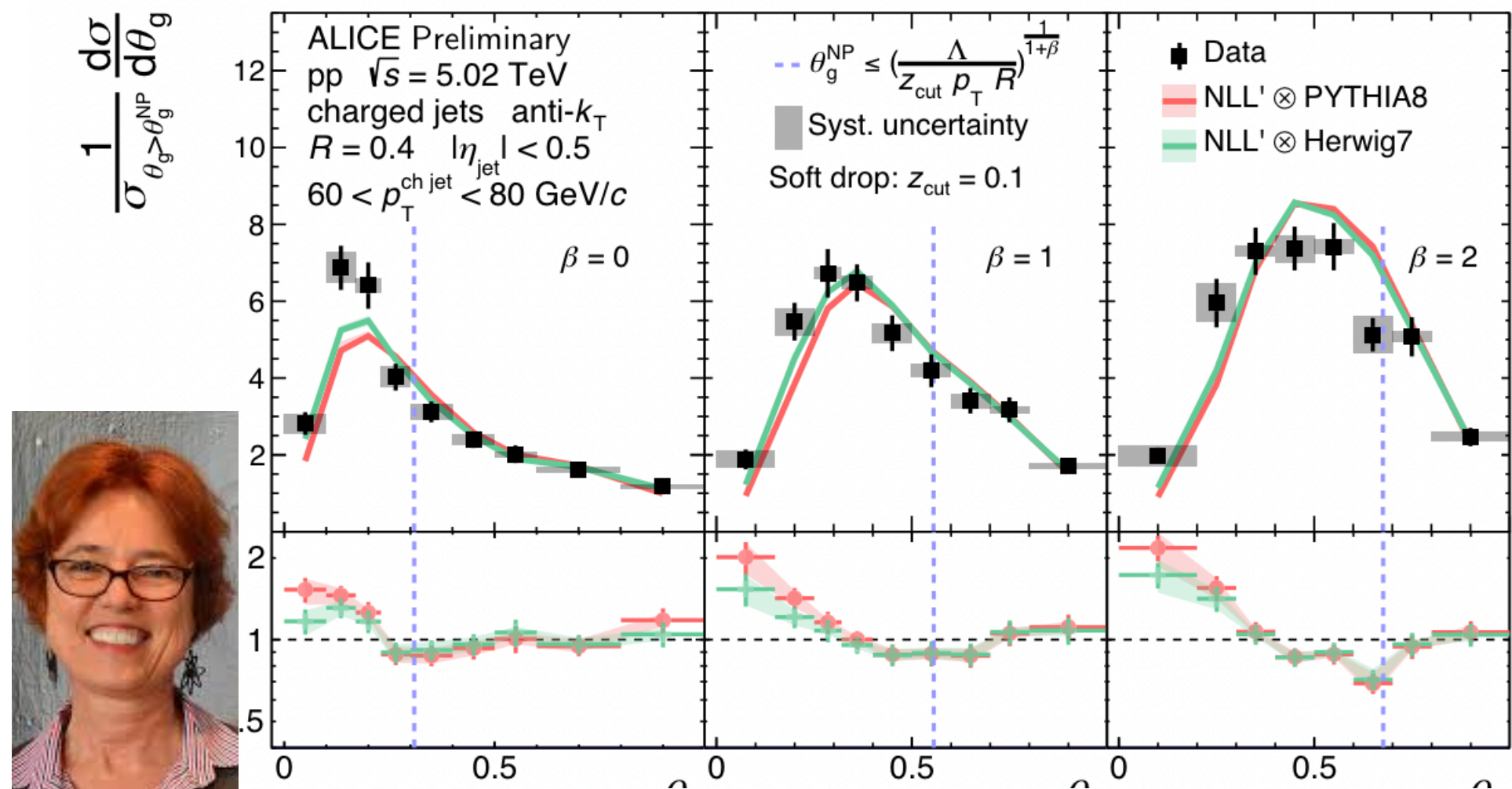


Figure 7.89: Predictions for jet angularities at the EIC: Purely perturbative results (yellow band) and with a nonperturbative shape function (red band) compared to simulations from PYTHIA 6 [76].



EXPERIMENTS MEET THEORY

Kyle Lee



EXPERIMENTS MEET THEORY

Kyle Lee

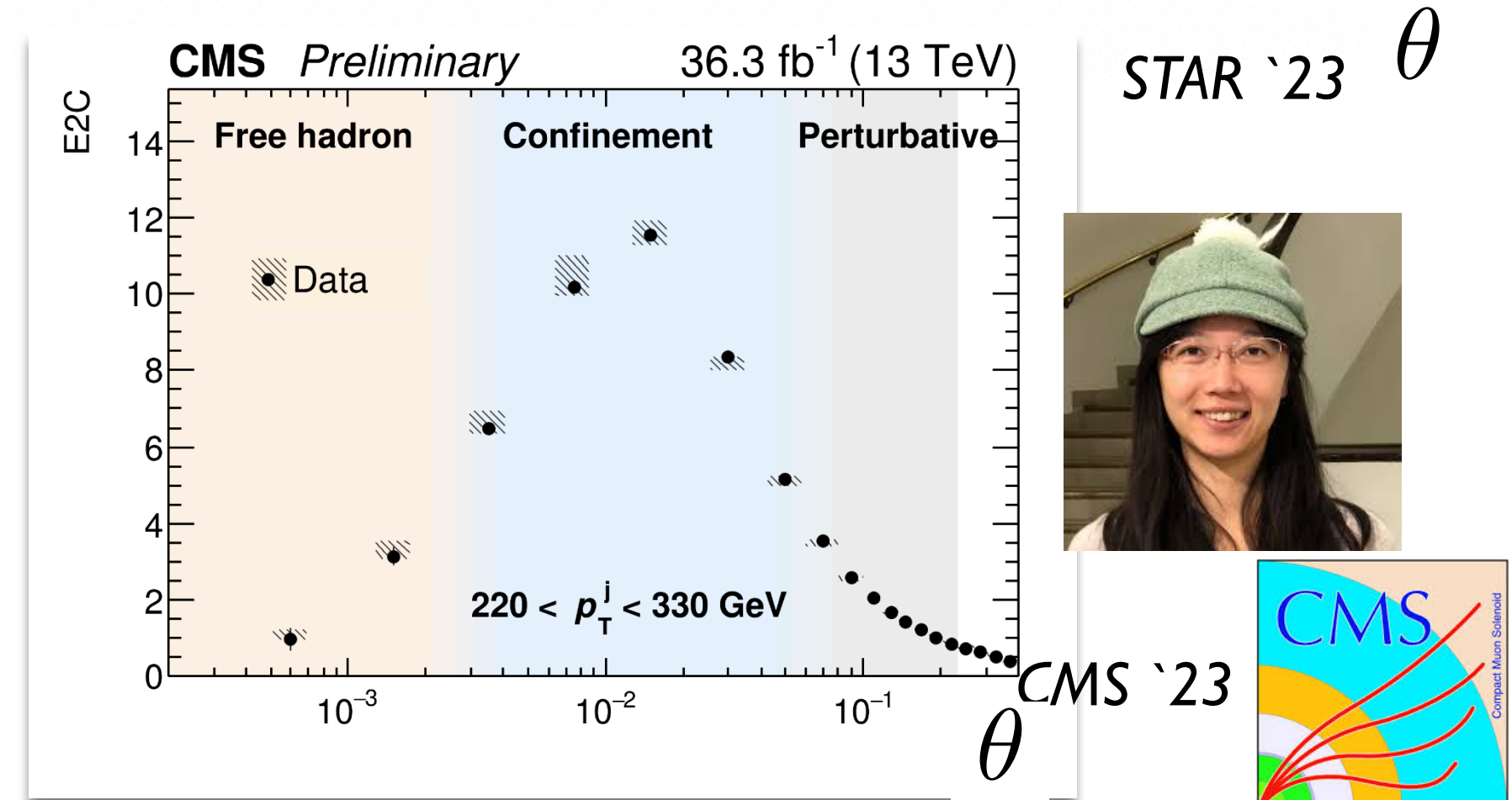
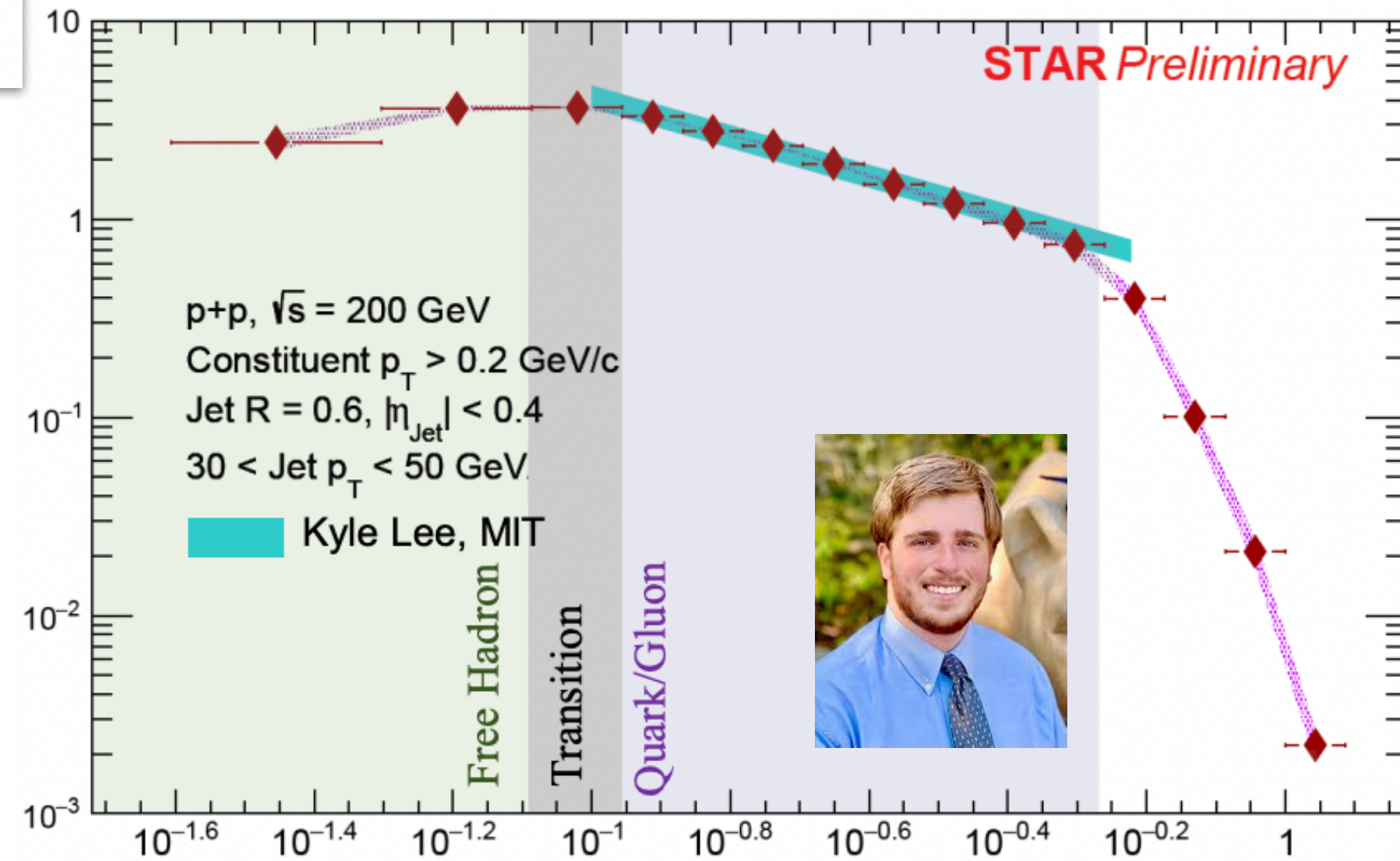
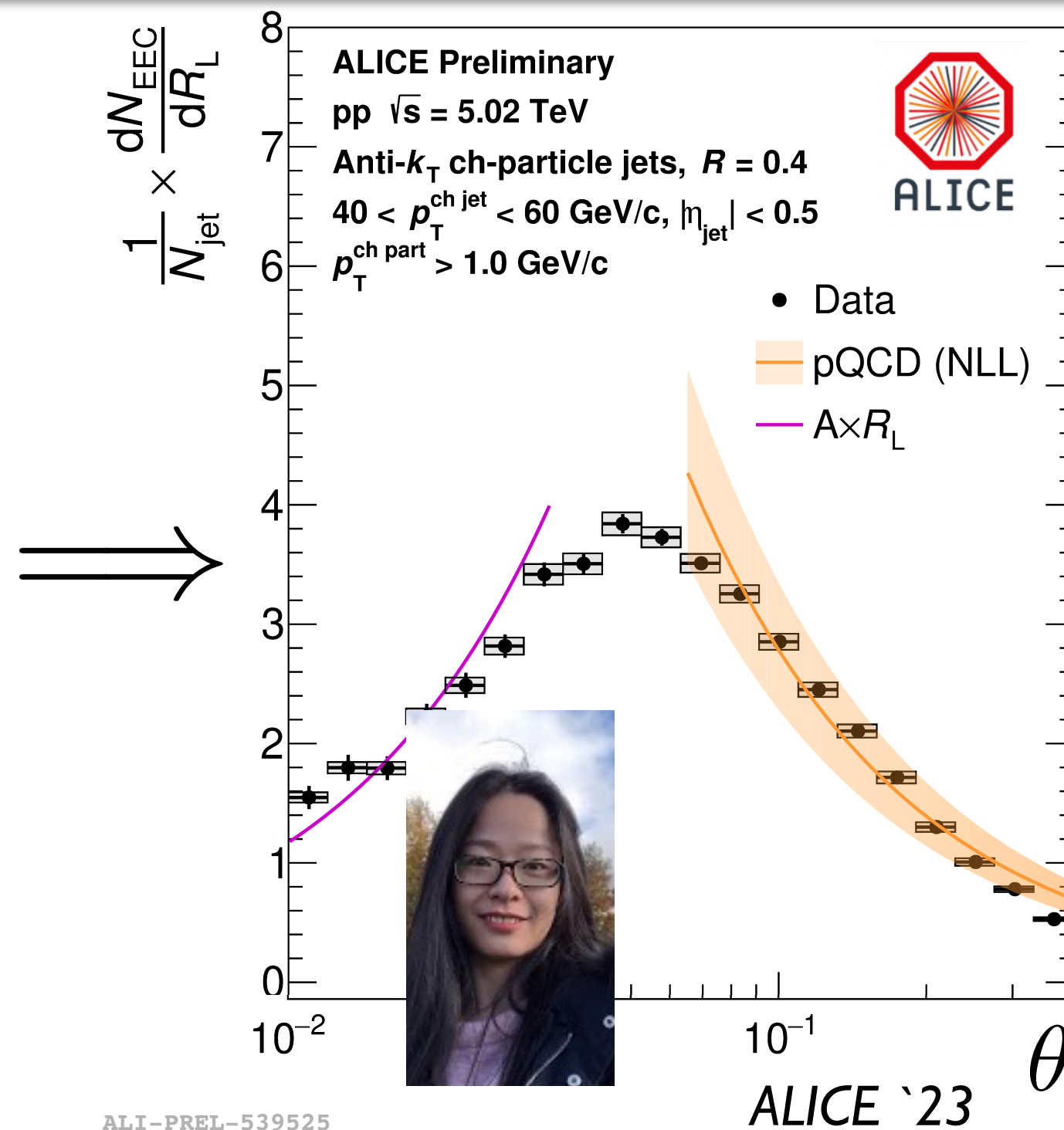
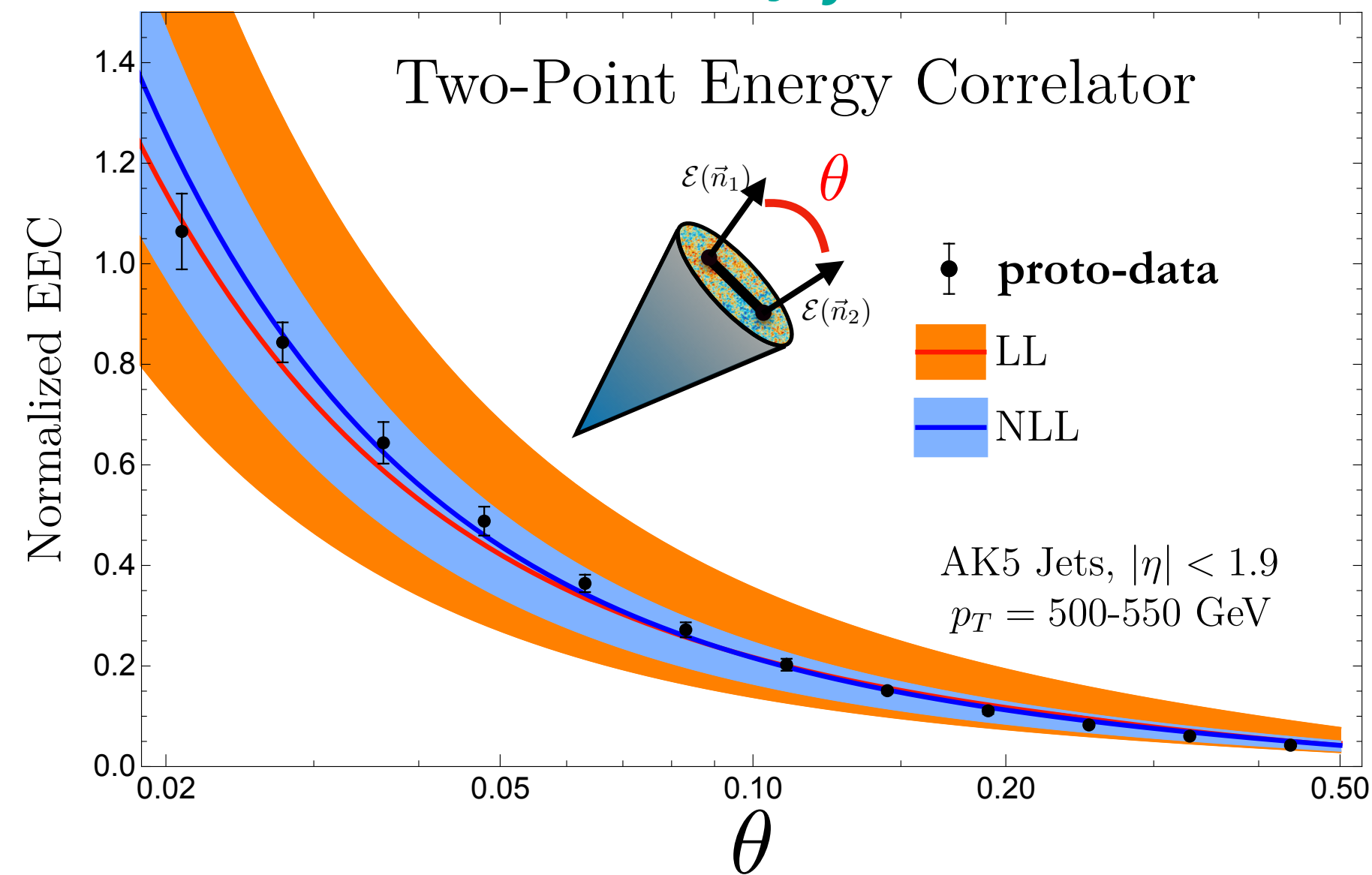


STRONG INTERACTIONS | NEWS

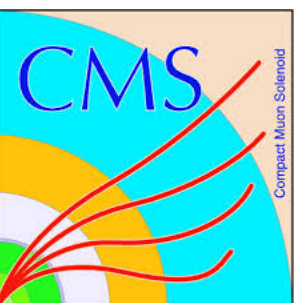
Measuring energy correlators inside jets

3 November 2023

KL, Meçaj, Mout `22

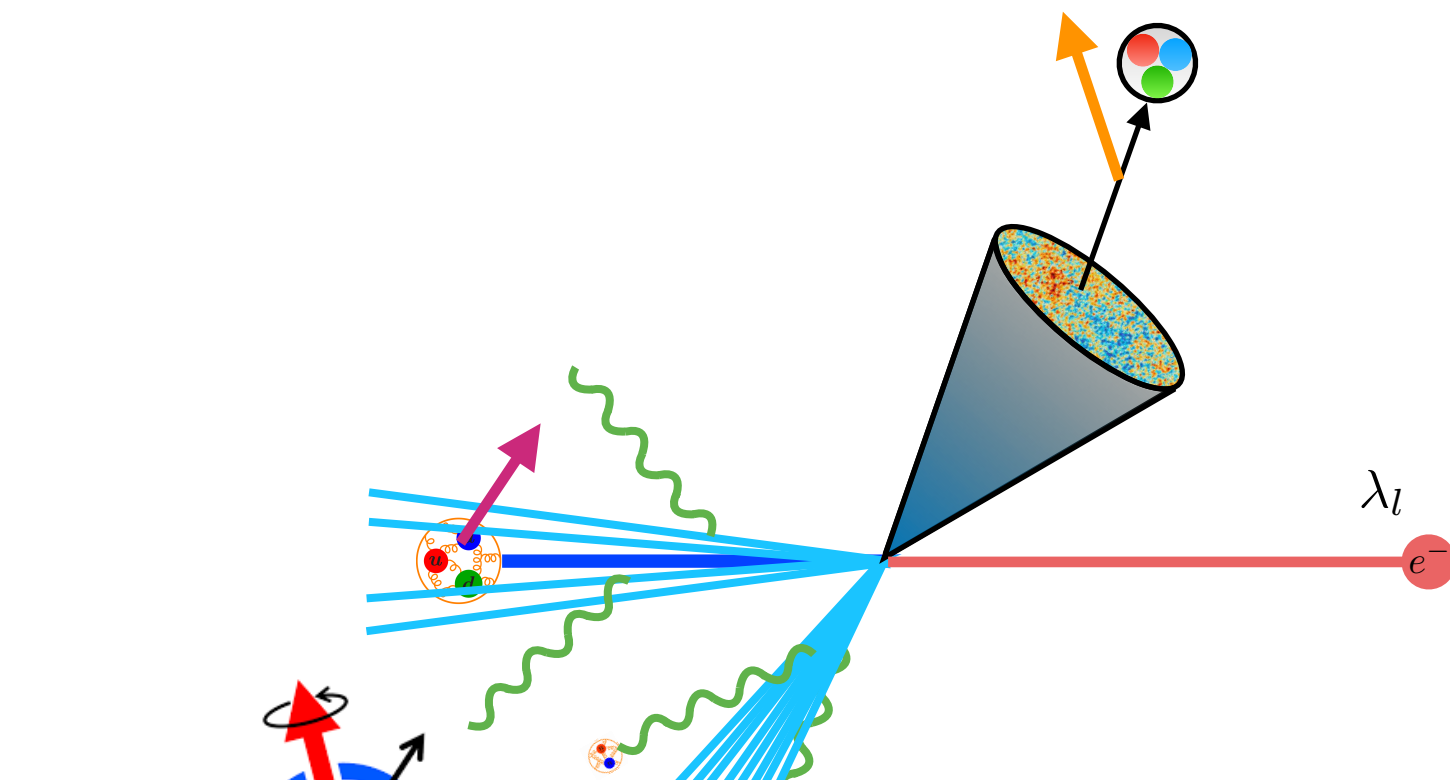
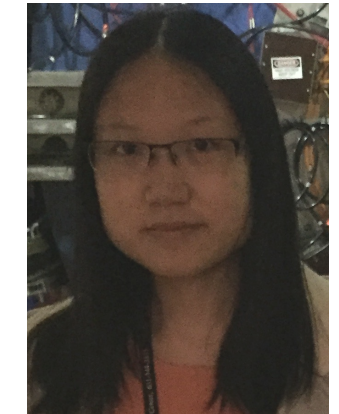
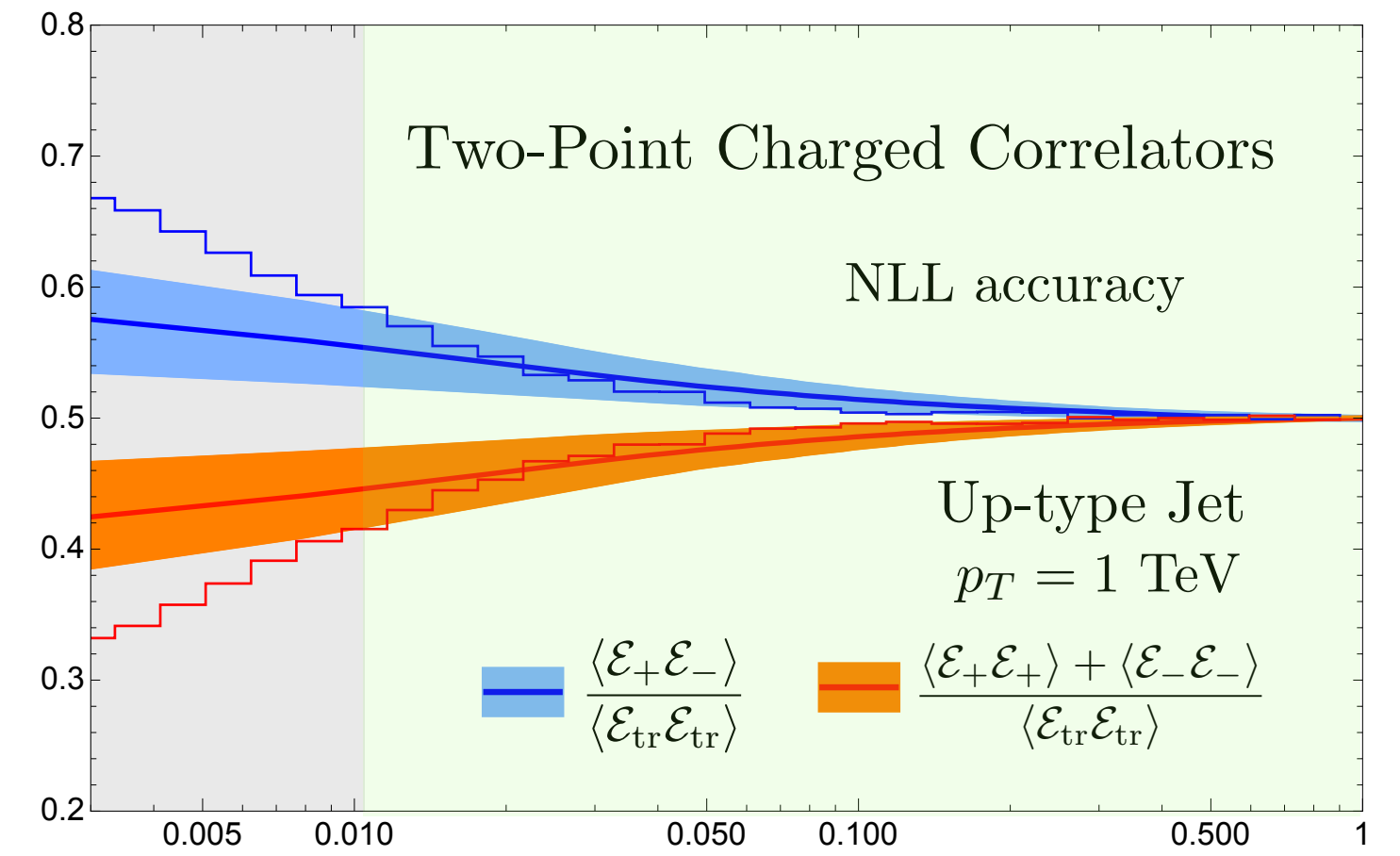
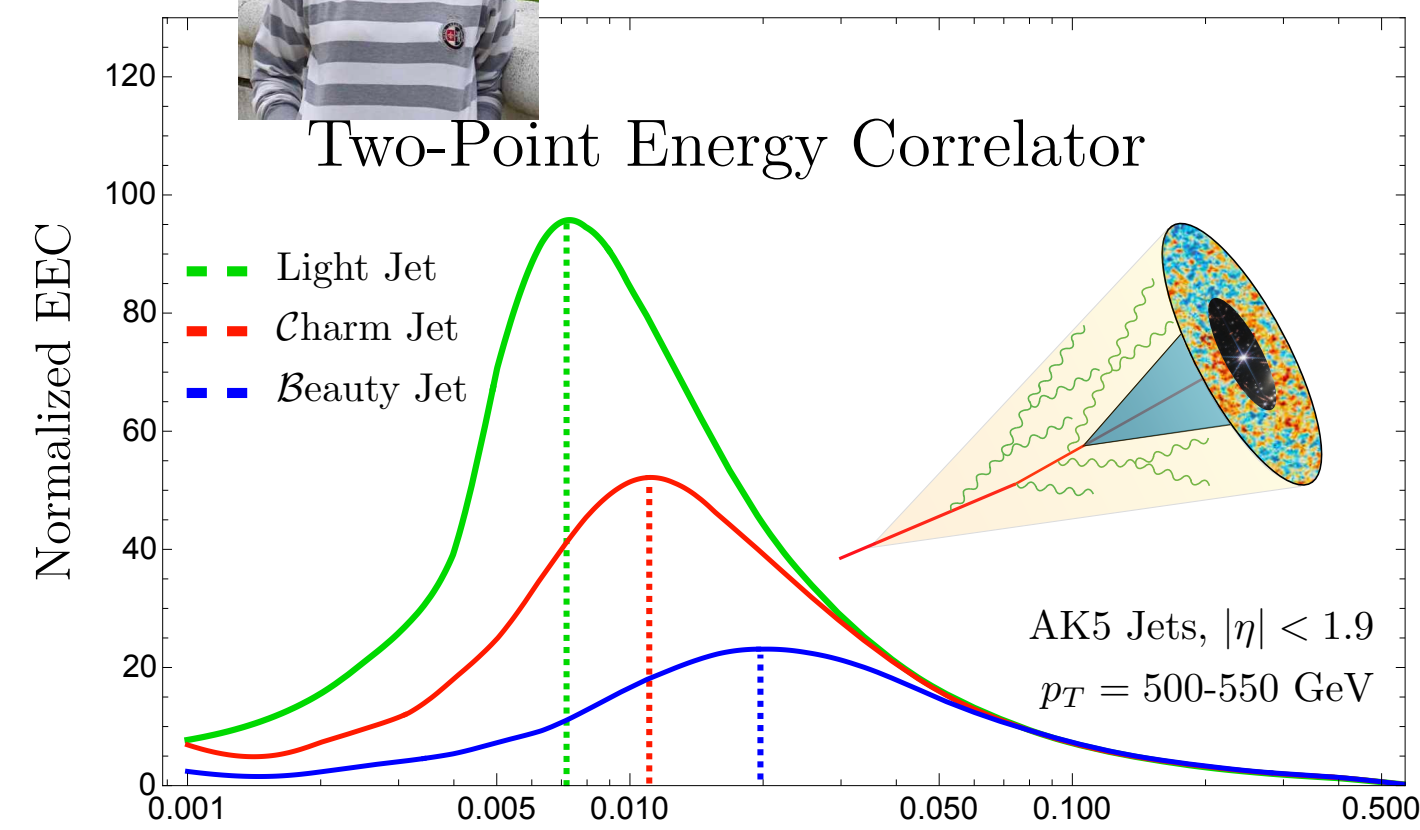
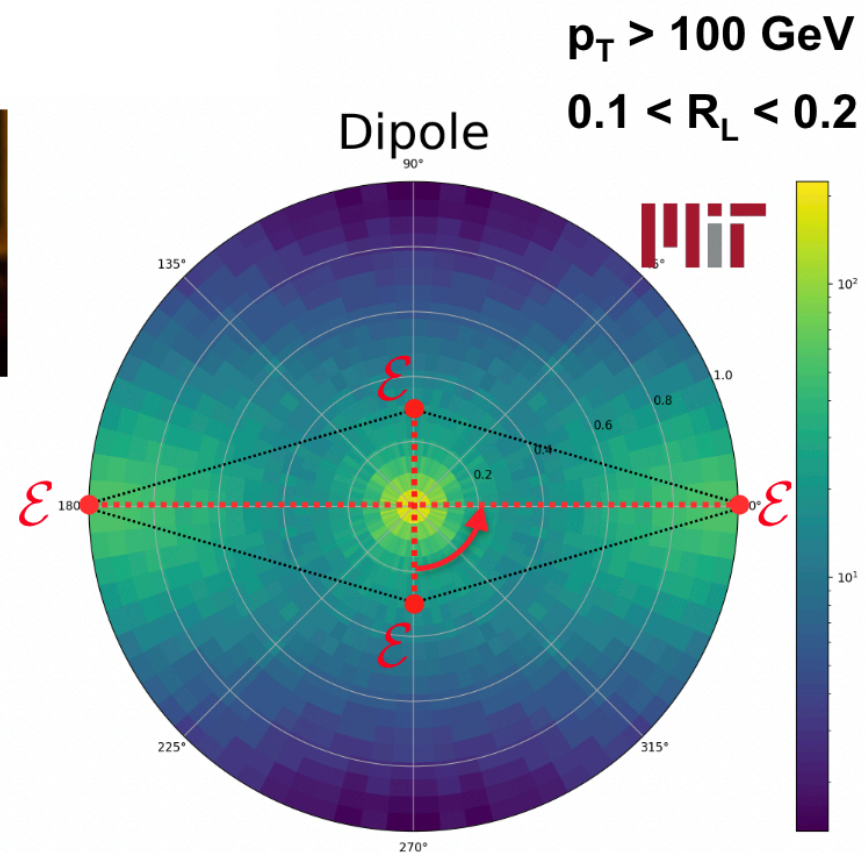
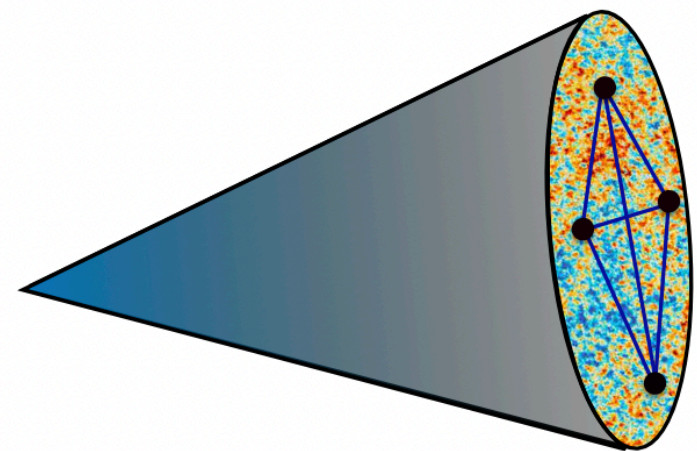


JETS ELUCIDATE HOW PARTONS
EVOLVE INTO HADRONS

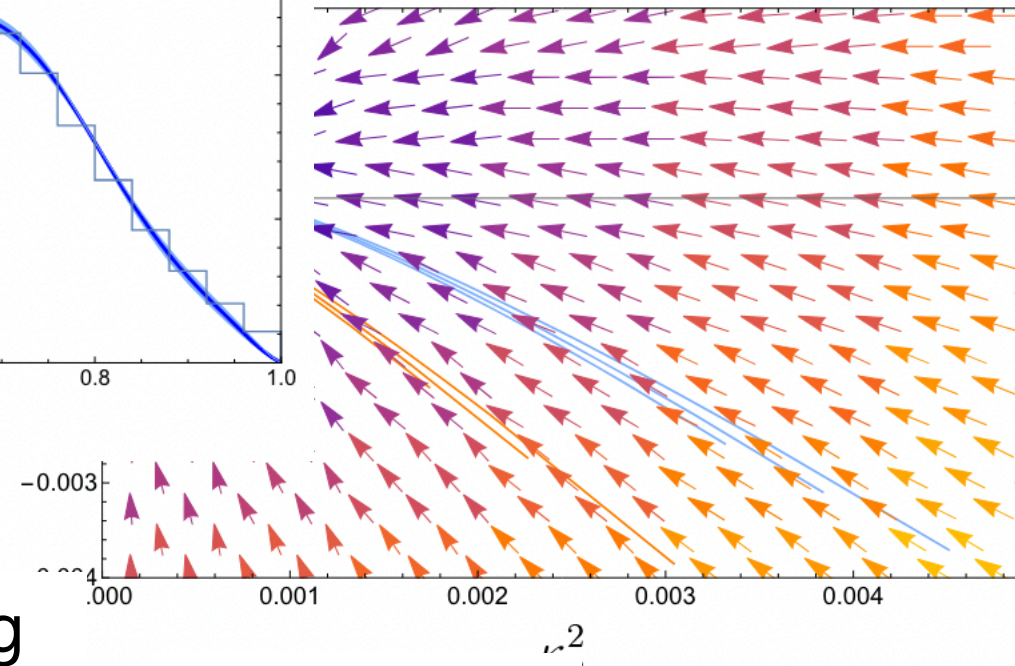
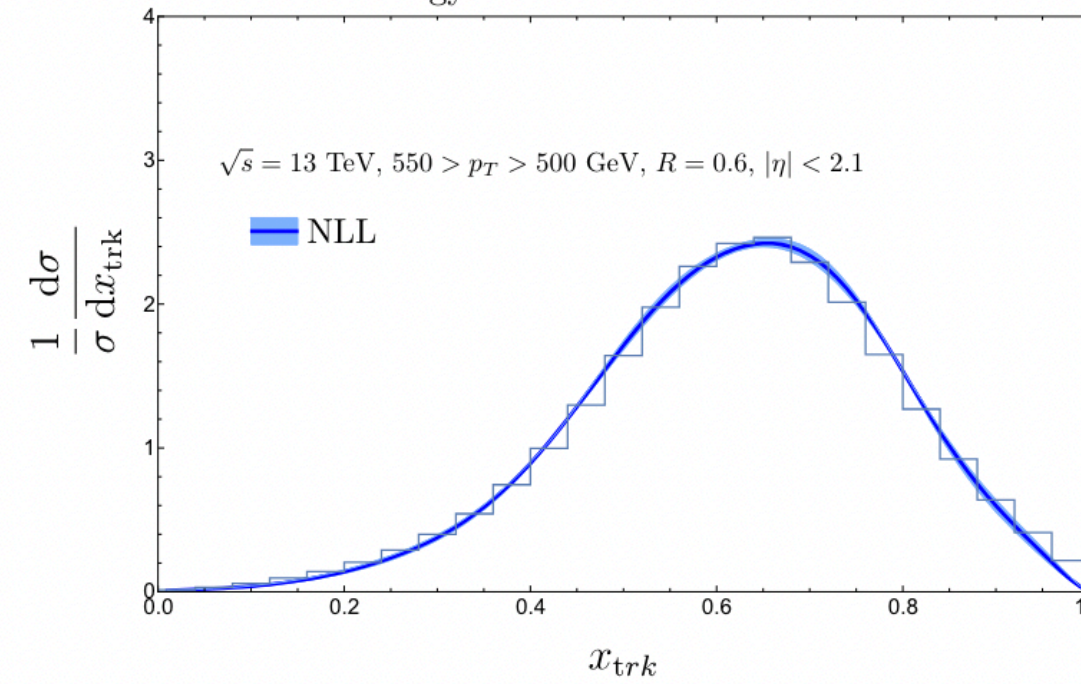


EXPERIMENTS MEET THEORY

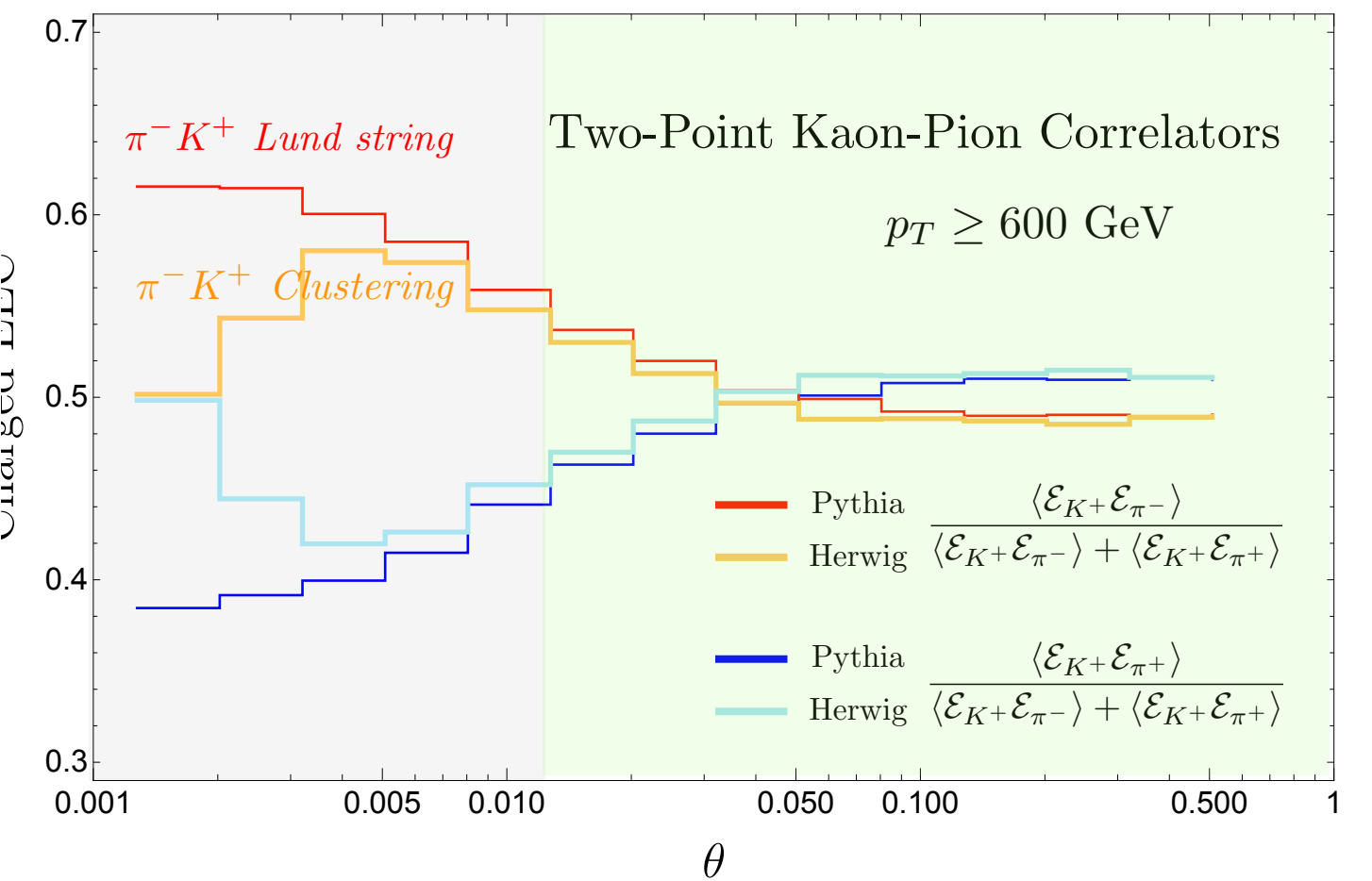
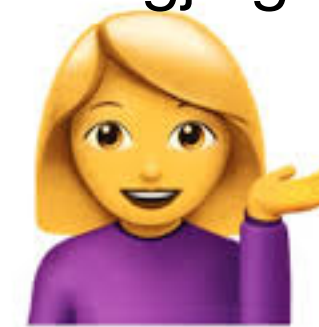
Kyle Lee



Track Energy Fraction Inside Jets at the LHC

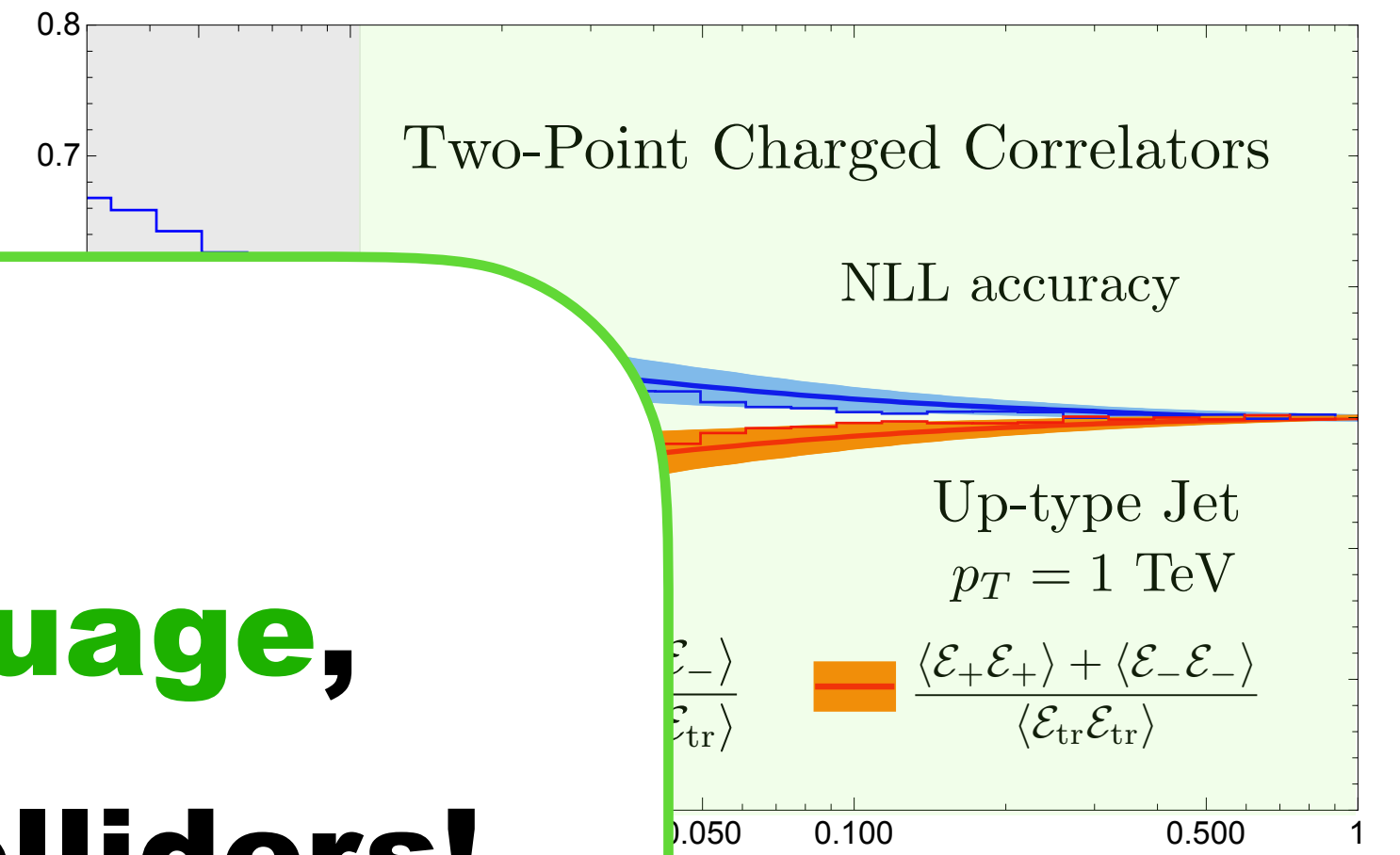
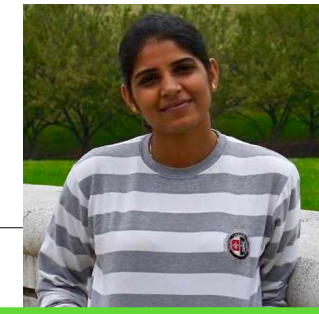
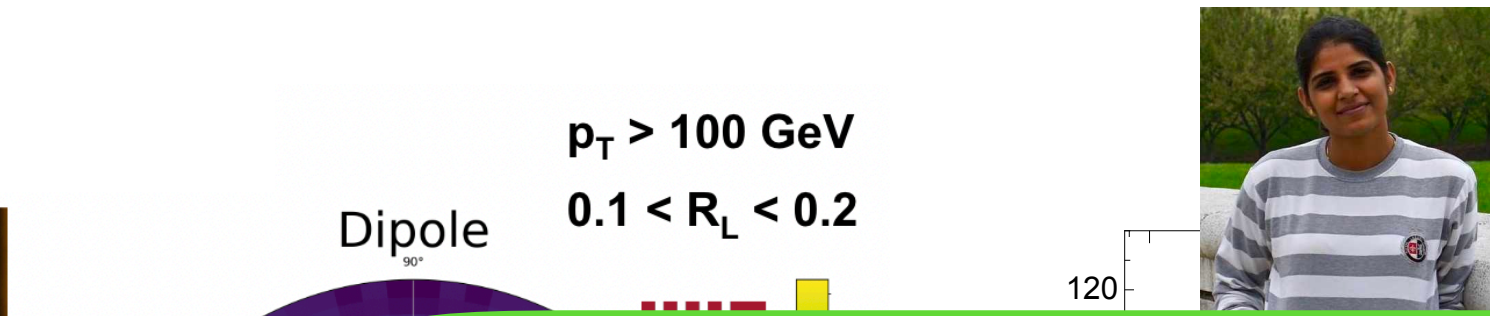
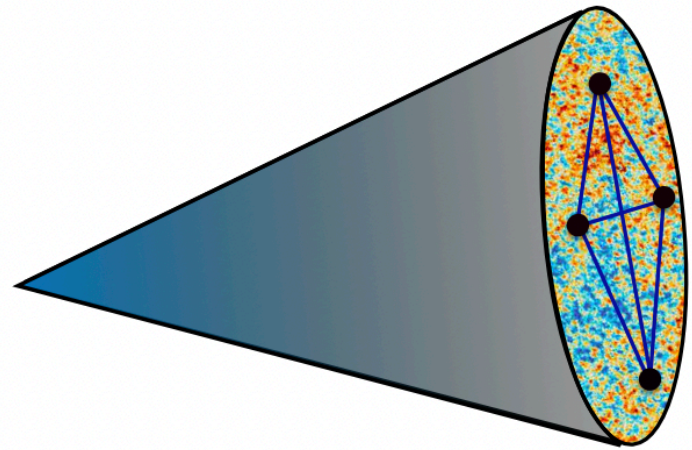


Jingjing



EXPERIMENTS MEET THEORY

Kyle Lee



Jets form a **universal language**,
uniting studies across all colliders!

More on my talk!

