

# 2023年春季学期计划

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2023/2/10

- 2-3月：完成Run19 3.85 GeV FXT (3.0) He4L 的分析
- 测量 (Run19+20) 7.3 GeV FXT (3.9), Run 20 9.8 GeV FXT (4.5) 的氢超核H3L, H4L 产额
- 需要等2019 FXT Au+Au 3.2 GeV hypernuclei embedding
- 可以先进行raw yields分析部分, efficiency study可以先准备代码
- Opportunities: 测量Run21 3.85 GeV FXT (3.0) He4L, He5L产额; 寻找双 $\Lambda$ 超核

(6) Run19 14.6 COL - **done** > Run20 11.5 COL > Run20 9.2 COL < -9.2 GeV QA-ing, 11.5 GeV will be coming soon

(7) Run21 Opportunities: 200 GeV O+O (including st\_upc) > 200 GeV d+Au > 17.3 COL > (Run20+21) 26.5 FXT

- (7.2) > 3.85 FXT I (3.0) > 44.5 FXT (9.2) > 70 FXT (11.5) > 100 FXT (13.7) > 3.85 FXT II (3.0)

|                                  |                                                                       |
|----------------------------------|-----------------------------------------------------------------------|
| ${}_{\Lambda\Lambda}^4\text{H}$  | ${}_{\Lambda}^4\text{He} + \pi^-, {}_{\Lambda}^3\text{H} + p + \pi^-$ |
| ${}_{\Lambda\Lambda}^5\text{H}$  | ${}_{\Lambda}^5\text{He} + \pi^-$                                     |
| ${}_{\Lambda\Lambda}^6\text{He}$ | ${}_{\Lambda}^5\text{He} + p + \pi^-$                                 |