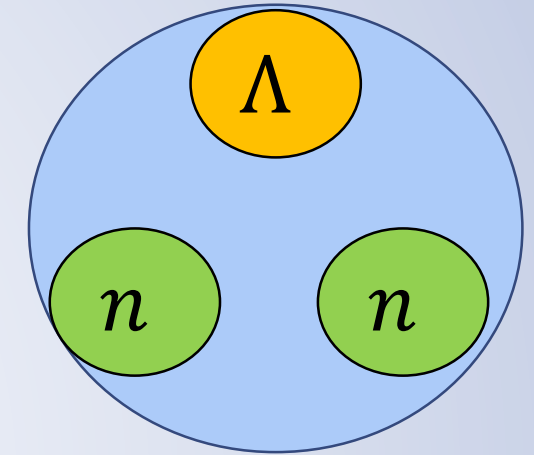


What is $nn\Lambda$??

No charge nuclei

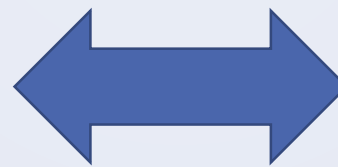
Neutron rich matter ($T = 1$)



Contradiction

Theoretical model

Unbound state



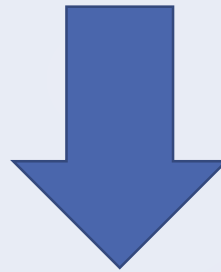
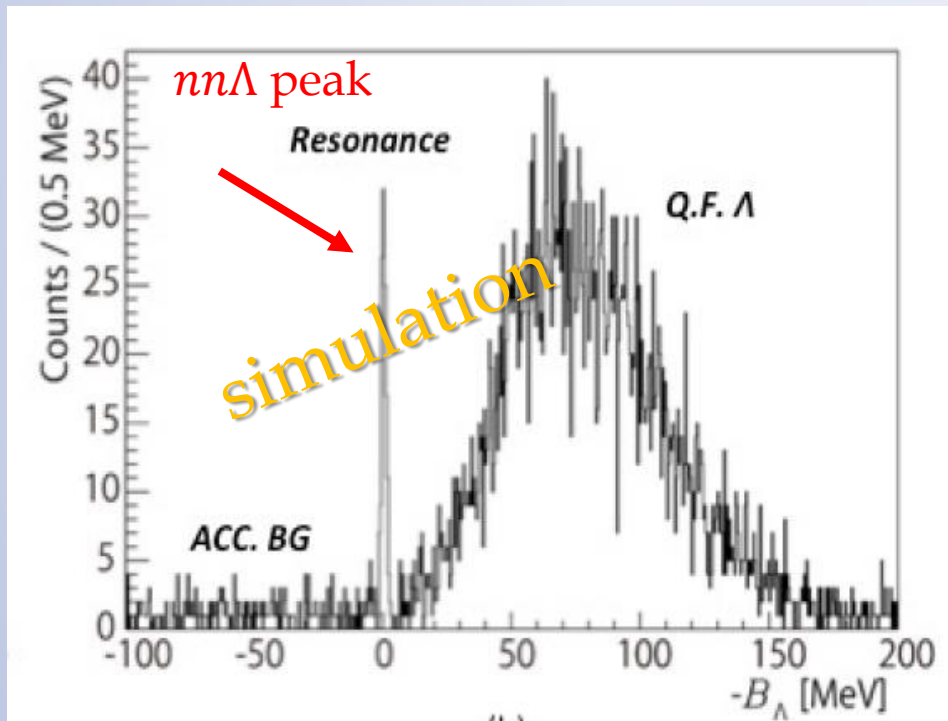
Experimental data

Bound state??

We search for $nn\Lambda$ state at Jefferson Lab

$nn\Lambda$ experiment (E12-17-003)

$nn\Lambda$ experiment was performed in Nov. 2018. (M2)

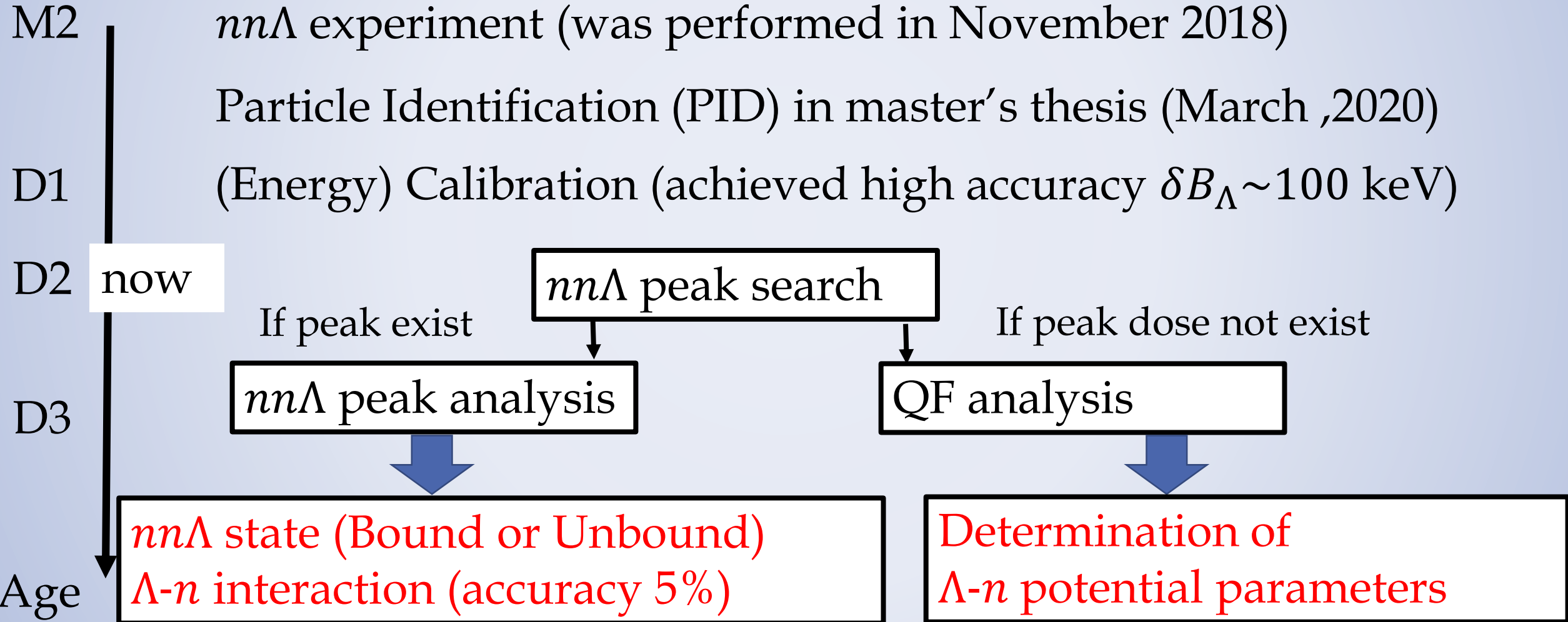


Analysis (D1-D3)

1. $nn\Lambda$ peak search
2. peak or QF study

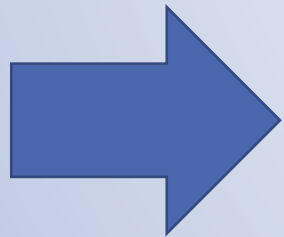
1. Determination of $nn\Lambda$ state
2. Study of Λ - n interaction

Plan of GP-PU Program



GP-PU Oversea Program (3 mounts)

- JLab (2 weeks) in August
- Future plan 2020 ~
 - 1 month stay at JLab (for discussion with L. Tang about analysis around August)
 - two weeks stay at Mainz (for participating in Bean times around March 2021)
 - More 1 month stay at JLab (for preparation of $^{40,48}_{\Lambda}\text{K}$ experiment)



Totally I'll achieve more than 3 month