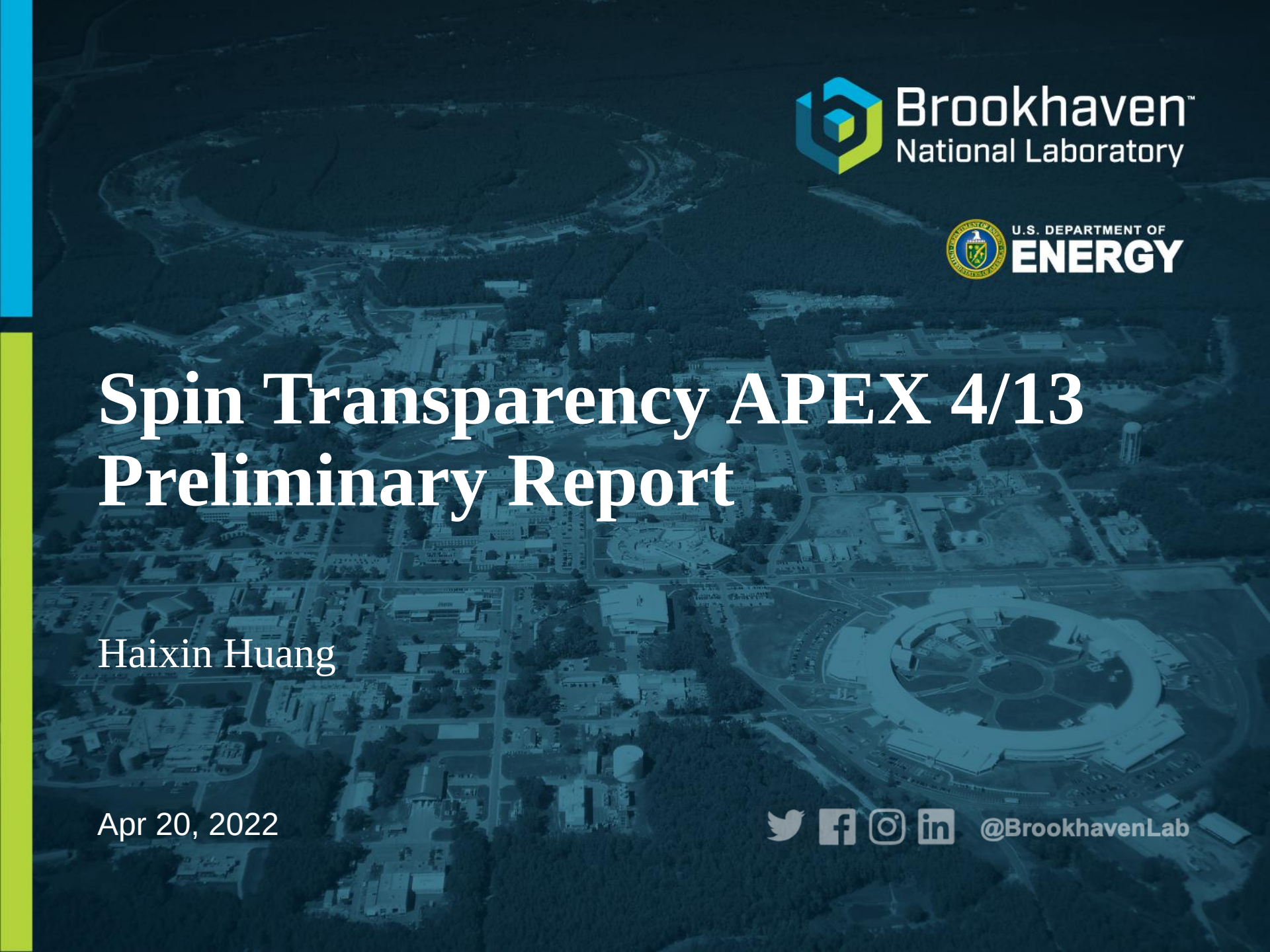

Spin Transparency APEX 4/13 Preliminary Report

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Summary of the spin transparency APEX

1. we tried to use constant spin tune this time. But the initial polarization is lower in this state. We confirmed that by injecting into the snake setting two weeks ago and measured similar polarization as before. We did it twice and got reproducible results.
2. We used smooth ramp through the whole experiment. There is still polarization loss in this case. We tested mainly the spin flip case. With or without feedbacks, the efficiency didn't change by much. We also tried spin tune of 0.03. The efficiency seems worse in this case.
3. The one step radial rotation was done, and it showed polarization loss, too.
4. We finally did the ten step measurements but skipped a few points as we ran out of time. It was interrupted by beam abort. We refilled and finished the scan.

In summary, with constant spin tune and feedbacks, the polarization loss is still present.

All Nine Fills and Polarization Results