

J-FUTURE workshop Summary

- Many thanks to presenters, discussions panelists (and all attendees)!
- We investigated opportunities in three main directions + necessary infrastructures
 - 1) Nucleon/nuclei structure via DIS, SIDIS, EXCLUSIVE reactions
 - 2) Hadron spectrum via (semi-)exclusive (exotic) MESON and BARYON production
 - 3) Physics beyond hadronic interactions: Light Dark Matter, muon and neutrino beams
 - 4) infrastructures - DETECTORS and ACC - POSITRON, HI-LUMI, HI-ENERGY JLab upgrades
- Many ideas were presented as an extension of the current JLab program or as a unique option at an upgraded CEBAF/JLAB
- Two dedicated discussion sessions were not enough to accomodate all thoughts and comments

★ Strong interest in JLab upgrades by USERS and lab management

★ Solid ground for a sound proposal for JLab upgrade(s)

... but a long way to go

- Define priorities in the physics program (golden channels vs comprehensive physics program)
- Define inputs to stage the three possible different upgrades (high energy, high lumi, positrons)
- Define a strategy to cope with the EIC competition: identify complementarities
- Define a work plan to match the next NSAC Long Range Plan timeline
- We propose to create four WGs (3 physics + 1 technical)
- Coordinate the USER activity in the next few months
- Coordinate with JLab topical workshops and acc studies planned for the next few months
- Prepare the ground and four summary reports for the ECT* workshop in September 26-30 2022
- Contribute to the white paper in the fall 2022