



# SUMMARY AND NEXT STEPS

6<sup>th</sup> Forward Physics Facility Meeting, CERN

Jonathan Feng, UC Irvine, 9 June 2023

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# THANK YOU!

Thanks to all: 167 registrants and additional participants, speakers, discussion leaders, WG leaders, organizers, and hosts CERN and Jamie Boyd



# LOTS OF PROGRESS – SEE TALKS!

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- WG0: New results from the CERN technical teams, core study, all seemingly in a good direction
  - Remaining issues with compactification at the surface, long-term drift of the tunnel.
  - Core study results available with revised cost estimate in the coming month or so.
- WGs 5-9: Experimental designs all improving, maturing
  - Results from sweeper magnet studies underway will be important step to understand the experimental environment.
  - Critical component: integration of experiments into a unified whole.
- WGs 1-4: Physics groups: significant activity from all 4 WGs
  - WG1-3: Lots of new activity and impressive results with neutrinos, QCD, astroparticle physics, all unique to FPF (TeV neutrinos)
  - WG4: Many, many BSM models already analyzed, now an emphasis on new models, models that exploit high energy
  - Theory Day tentatively scheduled for September 18-19, online, but with in-person option hosted by CERN theory group.

# NEXT STEPS

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- Next steps have been informed considerably by the recent, but very helpful, meeting with PBC and LHCC leadership.
- Many discussions on review timeline and procedure (see previous talks). But on our side, we have some very well-defined work to do:
- Immediate future
  - Define a revised organizational structure, including a coordination panel to make decisions that concern and impact all experiments.
- In the next few months (before FPF7 ~ Oct or Nov 2023?)
  - Core study results.
  - A document summarizing the core study results, additional facilities updates, revised cost estimate for CERN host lab costs.
  - A complete and unified plan for size and placement of experiments in the cavern.
  - Completion of “flagship” physics studies that emphasize core strengths and also complementarity with rest of the world-wide program.
- Depending on the results, by late 2023 or early 2024 we will prepare an LOI to the LHCC that meets the needs specified by the LHCC with regard to length and weight of topics.