

LBNF / **DUNE** Update

Community Advisory Board

Chris Mossey, Deputy Director for LBNF

28 September 2017

LBNF Update



- Strong support - Hosted by Governor Daugaard and SDSTA; participants included:
 - International agencies: CERN, INFN, and STFC
 - Congressional delegations
 - DOE
 - Executive Office of the President

Strong support of project continues...

Deputy Assistant to the President and Deputy U.S. Chief Technology Officer Michael Kratsios, Office of Science and Technology Policy:

“Today’s groundbreaking for the Long-Baseline Neutrino Facility... serves as a model for what the future of mega-science research looks like: an intensely collaborative effort between state, local and federal governments, international partners, and enterprising corporate and philanthropic pioneers whose combined efforts will significantly increase our understanding of the universe.”

- FY 2019 Administration Research and Development Budget Priorities memorandum of 17 August 2017: “Innovative partnership models involving other agencies, state and local governments, the private sector, academia, and international partners can help maximize utilization of underused facilities and lead to sharing the costs of new R&D facilities.”

LBNF-DUNE is just what EOP and OMB are looking for!

Economic Impact Video shown at Groundbreaking

<http://vms.fnal.gov/w1/OC/170712-LBNFImpactReview/index.htm>

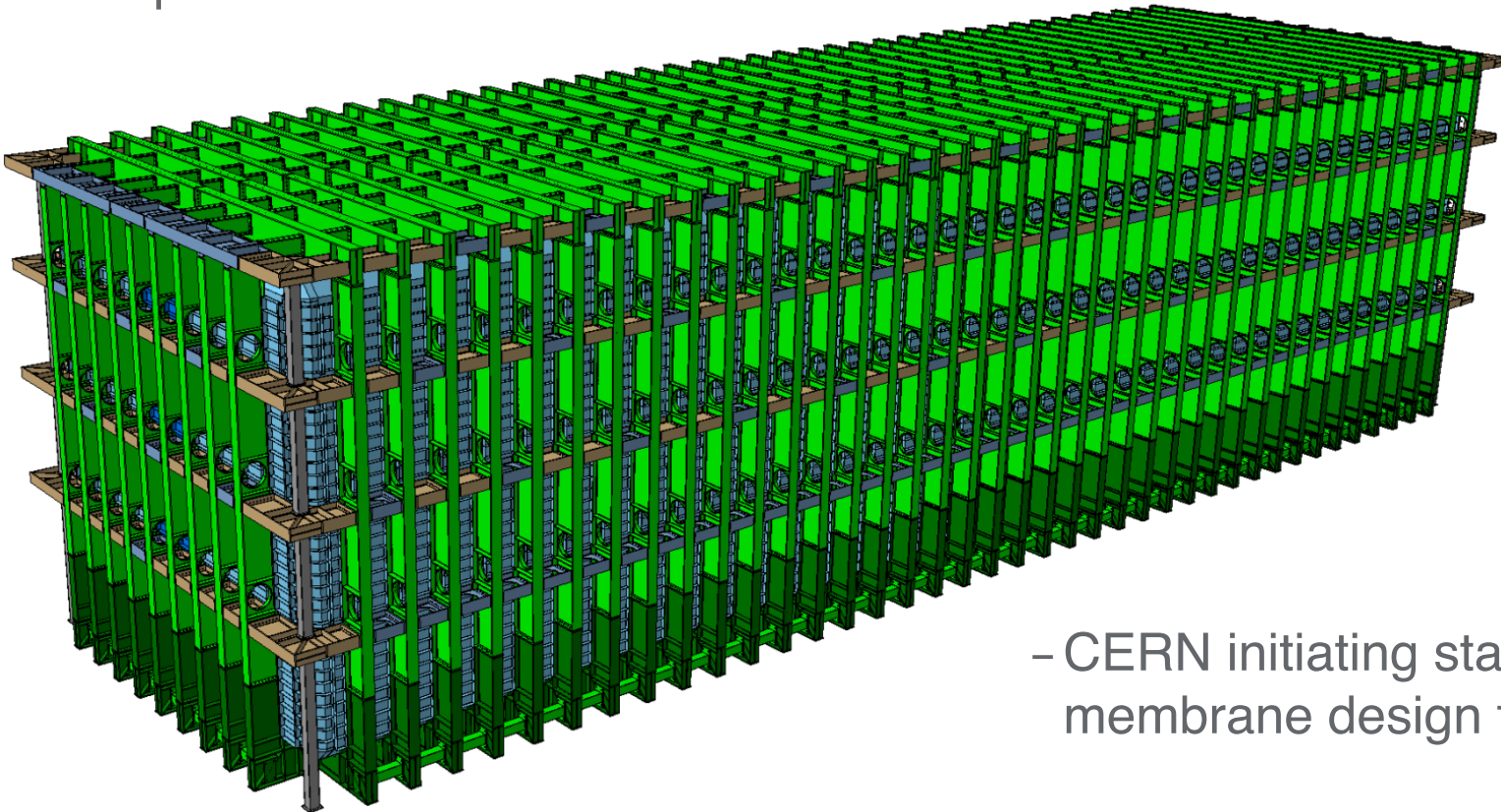
UK Science and Technology Agreement

- First ever S&T agreement between U.S. and U.K. signed on September 20th by Science Minister Jo Johnson
- Commits £65M (about \$88M) to DUNE, LBNF, and PIP-II
- First major commitment from a country!
- Working more...



LBNF Update

- Design Review for v3 of warm cryostat structure held on 21-22 August at SURF
 - Improved design simplifies transport of components to 4850L and speeds construction.



- CERN initiating start of membrane design this fall

Time out during design review for eclipse review...



Thanks to
Tom Nicol for
the photos
and Elaine
McCluskey for
the glasses!





- Kiewit/Alberici JV and LBNF project team at 29/30 August planning meeting at Sanford Lab
- Notice to Proceed issued on 20 Sept 2017

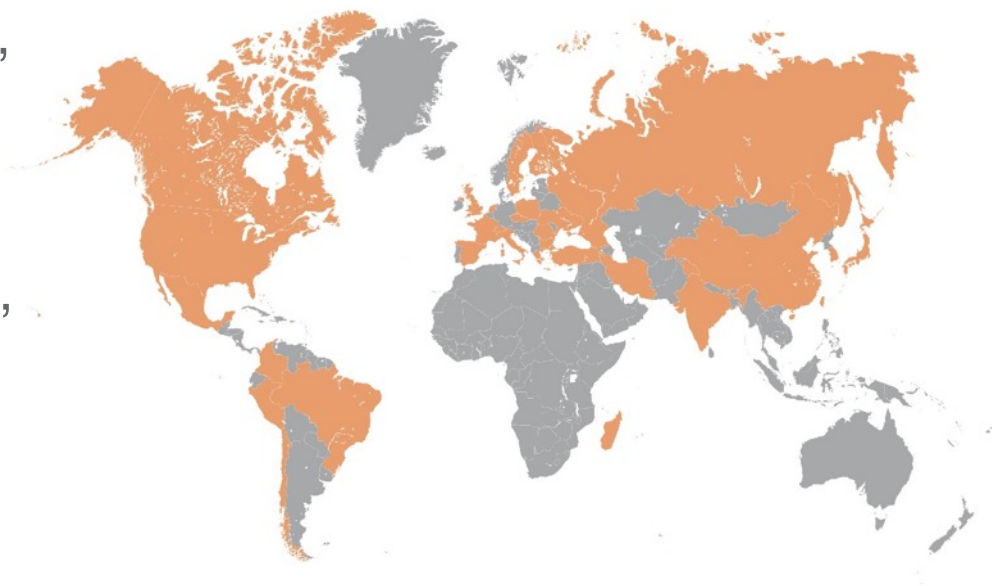
The DUNE Collaboration

As of today:

>60 % non-US

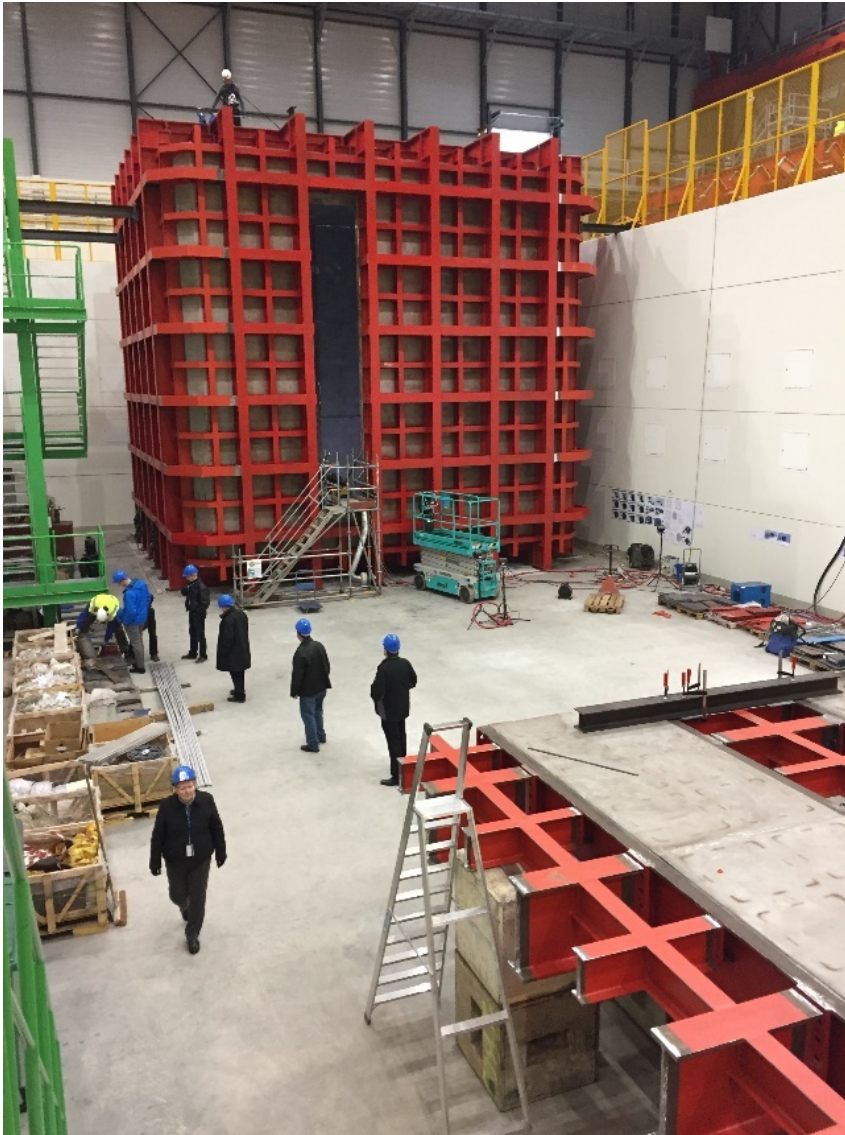
1032 collaborators from 176 institutions in 31 nations

Armenia, Brazil, Bulgaria, Canada, CERN, Chile, China, Colombia, Czech Republic, Finland, France, Greece, India, Iran, Italy, Japan, Madagascar, Mexico, Netherlands, Peru, Poland, Romania, Russia, South Korea, Spain, Sweden, Switzerland, Turkey, **UK**, Ukraine, **USA**



DUNE has crossed the 1,000 collaborator threshold!

ProtoDUNE progress at CERN... Single Phase Detectors







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NE PAS COUCHER

MATÉRIEL ÉLECTRONIQUE

FRAGILE

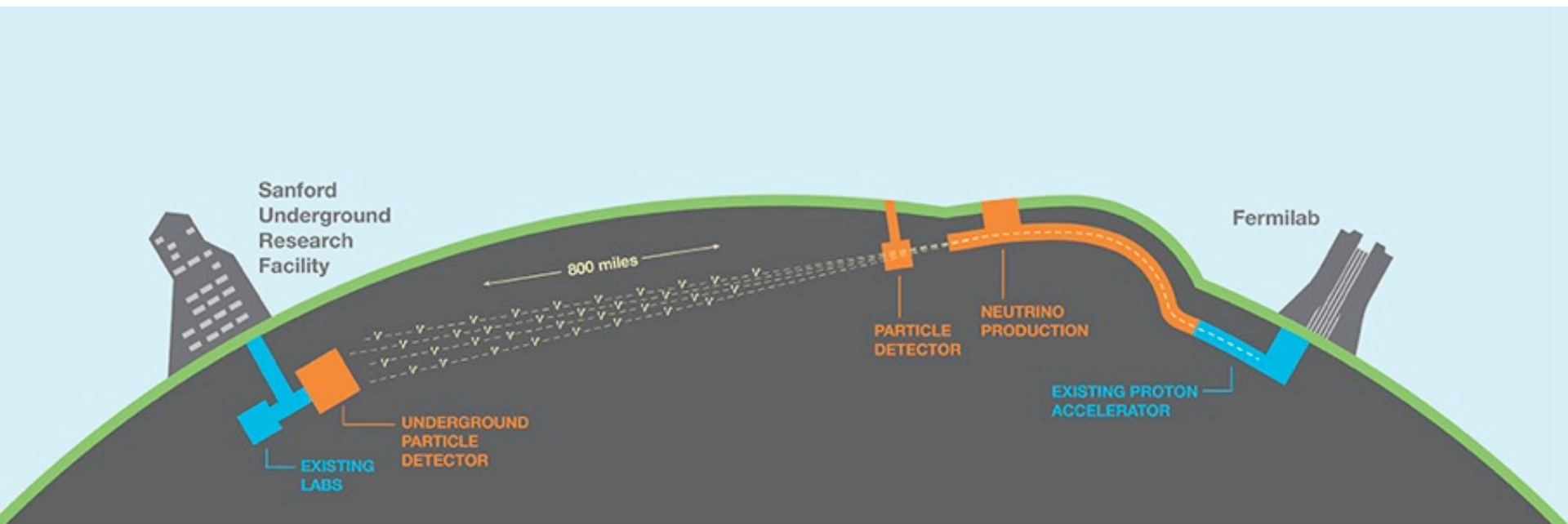
VOTRE RESPONSABILITÉ EST ENGAGÉE







Questions?



Animation Links:

- [LBNF/DUNE animation \(YouTube\)](#)
- [Video page \(FNAL website\)](#)

Social Media Links:

- [LBNF Facebook](#)
- [DUNE Facebook](#)
- [LBNF Twitter](#)
- [DUNE Twitter](#)