

Neutrino Frontier Report

All-conveners, 03/18/2022

Patrick Huber, **Kate Scholberg**, Elizabeth Worcester

NF Snowmass Timeline

develop
first draft
messages,
feedback

Extended outline due (NF): Dec 18
Series of meetings for community feedback on TG reports : Jan-Feb

finalize the
messages
from NF to
community

Topical Group Report drafts posted (NF): March 11

Community feedback period: March 11-April 10

NF Workshop @ ORNL: March 16-18 [hybrid]



All-Snowmass Community NF Colloquium Series: March-April

Preliminary (TG & Frontier) Reports due (NF): May 10

Preliminary (TG & Frontier) Reports due (Snowmass): May 31

Community feedback period: June 1 – July 26

Community Summer Study (Seattle): July 17-26

Final (TG & Frontier) Reports due (NF): Sept 9

Final (TG & Frontier) Reports due (Snowmass): Sept 30

communicate
to all-
Snowmass
community

finalize the
message to
P5 from NF in
all-Snowmass
context

Neutrino Frontier dates

All Snowmass dates

(NF) community feedback dates

White Paper submissions

- So far 34 formal submissions to NF
- We know of many more coming; authors are in touch with TG conveners in many cases
- Authors have expressed desire to submit to multiple TGs; the majority of NF WPs connect to more than one TG
- We have communicated that the deadline is soft, and submission by ~April 10 (our TG report comment deadline) will be generally OK
- Anecdotal knowledge of some Ukraine/Russia issues but no way of knowing overall numbers

Neutrino Frontier Meeting

- March 16-18, 2021 @ ORNL: hybrid, ~35 in-person
- Goal: **develop the NF message to the community**– no "content," only discussion
- <https://indico.fnal.gov/event/44794/> pw in Slack and email
- Plenaries:
 - DOE, NSF, last P5 experience
 - Panel discussions
 - Future of FNAL panel
 - DUNE strategy panel
 - Neutrinos across scales
 - Connections between Frontiers
 - Town Hall
- Parallels:
 - Topical Group feedback sessions
 - "Energy bins" for feedback with different basis than TGs
- Topical Group summaries (happening now)
- Closeout, proto-message

Drafts
for all TG
reports exist,
now gathering
feedback

Topical Group Report Drafts

Drafts will be placed here when available for each topical group

NF01: Neutrino Oscillations

[🌐 NF01 Report Draft v1](#)

[🌐 NF01 feedback spreadsheet](#)

NF02: Understanding Neutrino Anomalies

[🌐 NF02 Report Draft v1](#)

[🌐 NF02 feedback spreadsheet](#)

NF03: BSM

[🌐 NF03 Report Draft v1](#)

[🌐 NF03 feedback spreadsheet](#)

NF04: Neutrinos from Natural Sources

[🌐 NF04 Report Draft v1](#)

[🌐 NF04 feedback spreadsheet](#)

NF05: Neutrino Properties

[🌐 NF05 Report Draft v1](#)

[🌐 NF05 feedback spreadsheet](#)

NF06: Neutrino Interactions

[🌐 NF06 Report Draft v1](#)

[🌐 NF06 feedback spreadsheet](#)

NF07: Applications

[🌐 NF07 Report Draft v1](#)

[🌐 NF07 feedback spreadsheet](#)

NF08/TF11: Neutrino Theory

[🌐 NF08/TF11 Report Draft v1](#)

[🌐 NF08/TF11 feedback spreadsheet](#)

NF09: Neutrinos from Artificial Sources

[🌐 NF09 Report Draft v1](#)

[🌐 NF09 feedback spreadsheet](#)

NF10: Neutrino Detectors

[🌐 NF10 Report Draft v1](#)

[🌐 NF10 feedback spreadsheet](#)

Snowmass Community-Wide Neutrino Colloquia

Purpose is to advertise our science and get feedback on our plan in the wider (non-neutrino) community

- March 30 2-4 pm, April 6 1-3 pm, April 20 10 am- noon, April 27 noon -2 pm (times Eastern)
- ~3 talks each, 25'+15' per session. Time for questions and discussion.
- We will take care to selecting excellent speakers for non-technical presentations accessible to the whole community

