

Seattle Summer Study Schedule

Elizabeth Worcester

TGC Meeting

May 25, 2022

Introduction

- Schedule has undergone lots of revision but there is a nearly final version of the block schedule that will be made public soon
- Frontier and x-frontier parallels in the mornings
- Plenary/semi-plenary in the afternoons
- Schedule is not perfect – there are some sessions in parallel that ideally would not be, etc – only so much could be done given room and schedule constraints
 - Small changes may still be possible – please complain about the worst problems
- We are responsible for all NF parallels and two plenary sessions
 - Once Indico is populated, we will be responsible for filling in talk schedules, speakers, etc
 - We need to start thinking about speaker invitations ASAP
 - Parallel sessions will have designated conveners who will take responsibility for that session

General Schedule

- Block schedule that was posted last month has undergone some revisions, largely to build in a little more downtime
- First day and last two days plenary
 - We will have timeslots for brief reports, but we have no organizational responsibilities for these days
- Parallel days
 - Morning parallel sessions: 8-12
 - Lunch: 12-2
 - Plenaries: 2-6:30 (most days)
 - Several evening events (public lecture, dinner, networking events)
 - July 20 plenaries end at 4:30
 - July 24 parallels begin at 10:00

General Strategies

- Most talks/panels will be invited content, curated by the conveners
 - We want to be inclusive and make sure all ideas are heard
 - We do not want to host a 2nd version of Neutrino 2022 – limited time for physics content talks
- Early career parallel sessions are the place for contributed content
 - We made a push to contact experiment speakers' committees to make sure they understand this is the place for contributed content and ask them to solicit talks from their early career members. More on this later.
- Not just a neutrino workshop embedded in a big meeting – we want to encourage NF'ers to attend sessions from other frontiers and to encourage other frontiers to attend our sessions. This large-scale common meeting is only useful if this happens!

July 18

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|--------------|---|---------------------------------------|--|--|------------------------------------|--------------------------------------|--|-----------------------|-----------------------|-----------------------|---|
| 7-18 7:30am | | | | | | | | | | | |
| 7-18 8am | AF AF1 (19H) (20 ppl) | AF AF2-5 (19G) (30 ppl) | CF CF1 Discussion (18I) (HUB 337 - 50) | CompF CompF1 Experimental Algorithm Parallelization | EF BSM I (18K) (HUB 332 - 100 ppl) | EF Higgs I (18J) (JHN 102 - 100 ppl) | EF Strong Interactions I (18L) (KNE 220 - 100 ppl) | IF IF1 (23H) (20 ppl) | IF IF2 (23G) (20 ppl) | IF IF5 (23D) (20 ppl) | NF All-Frontier (18N) (KNE 130 - 300 ppl) |
| 7-18 8:30am | | | CF CF2 Discussion (18P) (HUB 337 -) | CompF CompF2 Theoretical Calculations and Simulation (20V) | | | | | | | |
| 7-18 9am | | | CF CF3 Discussion (18S) (HUB 337 -) | | | | | | | | |
| 7-18 9:30am | | | CF CF4 Discussion (18T) (HUB 337 -) | | | | | | | | |
| 7-18 10am | | | | | | | | | | | |
| 7-18 10:30am | | | | | | | | | | | |
| 7-18 11am | | | | | | | | | | | |
| 7-18 11:30am | | | | | | | | | | | |
| 7-18 12pm | Lunch (18LUN) (430 ppl) | | | | | | | | | | |
| 7-18 12:30pm | | | | | | | | | | | |
| 7-18 1pm | | | | | | | | | | | |
| 7-18 1:30pm | | | | | | | | | | | |
| 7-18 2pm | AI/ML (430 ppl) | Underground (18U) (KNE 130 - 430 ppl) | | | | | | | | | |
| 7-18 2:30pm | | | | | | | | | | | |
| 7-18 3pm | | | | | | | | | | | |
| 7-18 3:30pm | Lattice QCD (430 ppl) | The Next Accelerators (430 ppl) | | | | | | | | | |
| 7-18 4pm | | | | | | | | | | | |
| 7-18 4:30pm | | | | | | | | | | | |
| 7-18 5pm | | | | | | | | | | | |
| 7-18 5:30pm | DEI Talks and Panel (18Z) (KNE 130 - 430 ppl) | | | | | | | | | | |
| 7-18 6pm | | | | | | | | | | | |
| 7-18 6:30pm | | | | | | | | | | | |
| 7-18 7pm | | | | | | | | | | | |
| 7-18 7:30pm | Reception (18REC) (HUB 211A - 430 ppl) | | | | | | | | | | |
| 7-18 8pm | | | | | | | | | | | |
| 7-18 8:30pm | | | | | | | | | | | |
| 7-18 9pm | | | | | | | | | | | |
| 7-19 6:30am | | | | | | | | | | | |

We have a 4-hour introductory frontier meeting on the first day of parallels. Only a small portion of this is intended to be a status report/intro to meeting. Suggestions welcome for additional content, discussions, etc in this time slot.

July 20

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|--------------|-------------------------|-------------------------------------|--|---|--|------------------------------------|------------------------------------|---------------------------------------|---|--|--------------------------------------|---------------------------------------|--|--|
| 7-20 7:30am | | | | | | | | | | | | | | |
| 7-20 8am | AF AF6 (19D) (20 ppl) | AF AF7 (19C) (30 ppl) | CF Report Discussion (23Q) (KNE 130 - 300 ppl) | CompF CompF5 End User Analysis (20E) (20 ppl) | EF BSM II - non DM (19O) (KNE 210 - 100 ppl) | EF EWK I (19N) (KNE 120 - 100 ppl) | EF TOP I (19M) (KNE 220 - 100 ppl) | IF Workshop Plans (HUB 250 - 100 ppl) | NF DUNE P5 Strategy (Oscillation Physics) (20O) | RF RF6 3 Big Idea + 1 Experimental Summary White Papers (20B) (40) | TF TF9-TF11 (18C) (HUB 337 - 50 ppl) | UF UF1 (18B) (25 ppl) | | |
| 7-20 8:30am | | | | CompF CompF6 Quantum Computing (20T) (20 ppl) | | | | | NF DUNE P5 Strategy (BSM Physics) (20Y) (JHN 102 - 150 ppl) | RF RF7 Exp And Theory Overview - Hadron Spectroscopy | | XF UF-NF Long Baseline (18Q) (40 ppl) | | |
| 7-20 9am | | | | | | | | | | | | | | |
| 7-20 9:30am | | | | | | | | | | | | | | |
| 7-20 10am | | | | | | | | | | | | | | |
| 7-20 10:30am | | | | | | | | | | | | | | |
| 7-20 11am | | | | | | | | | | | | | | |
| 7-20 11:30am | | | | | | | | | | | | | | |
| 7-20 12pm | Lunch (20LUN) (430 ppl) | | | | | | | | | | | | | |
| 7-20 12:30pm | | | | | | | | | | | | | | |
| 7-20 1pm | | | | | | | | | | | | | | |
| 7-20 1:30pm | | | | | | | | | | | | | | |
| 7-20 2pm | | Neutrino (20BB) (KNE 130 - 172 ppl) | Rare Processes and AMO (215 ppl) | | | | | | | | | | | |
| 7-20 2:30pm | | | | | | | | | | | | | | |
| 7-20 3pm | | | | | | | | | | | | | | |
| 7-20 3:30pm | | | | | | | | | | | | | | |
| 7-20 4pm | | | | | | | | | | | | | | |
| 7-20 4:30pm | | | | | | | | | | | | | | |
| 7-20 5pm | | | | | | | | | | | | | | |

We have 4 2-hour parallel sessions on DUNE, focused on 4 different topics. We also have a x-frontier meeting with Underground Facilities. I am going to ask to swap this day of DUNE parallels with the previous day to reduce the impact of this conflict. This is our “semi-plenary” session, opposite Rare Processes. More on plenaries later.

4 DUNE “P5 Strategy” sessions: oscillation physics, BSM physics, detector technology, expanded physics scope
 These sessions will not be managed by the DUNE collaboration, but will be planned in coordination with them.

July 21

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| AF P5 Strategy colliders (24L) (JHN 102 - 100 ppl) | AF P5 Strategy technologies and test facilities (24K) (JHN 175 - 70 ppl) | CF Report Discussion (24M) (KNE 120 - 200 ppl) | EF BSM III (21N) (KNE 110 - 100 ppl) | EF EWK II (21P) (KNE 210 - 100 ppl) | EF Higgs II (21Q) (KNE 220 - 100 ppl) | IF IF7 (24G) (20 ppl) | NF Beyond neutrino mass physics reach of precision beta-decay experiments (21K) (20 ppl) | NF Blue Skye/Very Long Term ideas (21M) (30 ppl) | TF TF2-TF5 (18D) (JHN 111 - 50 ppl) | XF EF-CompF EF Centric Discussions (18X) (40 ppl) | XF IF-EF-AF-IF Detectors and MDI and Plots (21I) (40 ppl) | XF RF-EF-TF RF1 Flavor anomalies and exotics at colliders (22A) | XF UF-IF QIS (22F) (HUB 337 - 50 ppl) |
| Lunch (21LUN) (430 ppl) | | | | | | | | | | | | | |
| Rare Processes (21U) (129 ppl) | | | | | | | | | | | | | |
| Accelerator (129 ppl) | | | | | | | | | | | | | |
| Energy (21W) (KNE 130 - 430 ppl) | | | | | | | | | | | | | |

We have a 4-hour parallel on “beyond neutrino mass physics reach of precision beta decay experiments” requested by the topical group. We also have a 4-hour parallel on far future ideas. We are asking TGCs to recommend talks for this session based on whitepapers received. If there’s not enough content for this session, we can repurpose part of it.

July 22

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|---|---|--|--|-------------------------------------|---|-------------------------------------|-----------------------|-----------------------|---|-----------------------------------|--|--|---|---|
| AF P5 Strategy accel for neutrinos and PBC (24J) (HUB 332 - 70 ppl) | AF P5 Strategy beam physics and facilities (24H) (JHN 111 - 50 ppl) | AF P5 Strategy optimizing among funding sources (24I) (HUB 250 - 70 ppl) | CompF Report Discussion (200 ppl) CompF CompF7 Reinterpretation and long-term preservation of | EF BSM IV (23N) (JHN 102 - 100 ppl) | EF Strong Interactions II (23P) (KNE 220 - 100 ppl) | EF Top II (23O) (KNE 210 - 100 ppl) | IF IF8 (24F) (20 ppl) | IF IF9 (24E) (20 ppl) | NF Optimizing Among Funding Agencies (21L) (30 ppl) | RF RF3 Discussions (21B) (40 ppl) | TF TF4b-TF6-TF7 (18F) (HUB 337 - 50 ppl) | XF AF-EF Accelerator R&D Overseas (22G) (40 ppl) | XF NF-EF Cross-cutting issues (22H) (30 ppl) | XF TF-CompF QIS (21Z) (HUB 214 - 50 ppl) |
| Lunch (22LUN) (430 ppl) | | | | | | | | | RF RF5 Discussions (21R) (40 ppl) | UF UF5 UF3 (22Q) (25 ppl) | | XF EF-AF combined EF/AF report discussion (21V) (30 ppl) | XF RF-EF-TF RF7-EF6-EF7 hadrons as production probes; | CompF Industry Session (JHN 175 - 50 ppl) |
| Underground (22V) (KNE 130 - 129 ppl) | | | | | | | | | | | | | | |
| Theory (129 ppl) | | | | | | | | | | | | | | |
| Neutrino (22W) (KNE 130 - 430 ppl) | | | | | | | | | | | | | | |

We have a 2-hour parallel on “optimizing among funding agencies” – we are envisioning a panel discussion that may be most relevant for those working in non-HEP-funded areas or at the boundaries with HEP. Suggestions for topics to address welcome. We also have a 2-hour x-frontier parallel session with the Energy Frontier. In the afternoon, we have our plenary session. More on plenaries later.

July 23

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|--------------|---|--|---|--|--|---|--------------------------------|--------------------------------------|---|--|--|--|---|--|--|--|--|--|--|--|--|
| 7-23 7:30am | | | | | | | | | | | | | | | | | | | | | |
| 7-23 8am | AF All-Frontier (18M) (KNE 110 - 150 ppl) | AF Summary report discussion and tuneup (24C) (JHN 175 - 70 ppl) | EF Discussion and Summaries (24N) (KNE 130 - 300 ppl) | NF Early Career Presentations (Topic 1) (20I) (30 ppl) | NF Early Career Presentations (Topic 2) (20K) (JHN 102 - 60 ppl) | RF All-Frontier Discussions (23Y) (KNE 220 - 140 ppl) | TF TF1-TF3-TF4a (18G) (30 ppl) | TF TF8-TF10 (18E) (JHN 111 - 50 ppl) | XF IF-CF-CompF Instrumentation for Cosmic Frontier (21H) (30 ppl) | XF IF-CompF readout and AI/ML (21E) (JHN 175 - 40 ppl) | XF IF-NF Instrumentation for Neutrino Experiments (21G) (30 ppl) | XF IF-UF Cross-cutting Facilities (21F) (30 ppl) | XF NF-CF-IF Dark matter detector (22J) (KNE 210 - 50 ppl) | XF TF-CF Cosmic Frontier Theory (19K) (KNE 120 - 50 ppl) | | | | | | | |
| 7-23 8:30am | | | | | | | | | | | | | | | | | | | | | |
| 7-23 9am | | | | | | | | | | | | | | | | | | | | | |
| 7-23 9:30am | IF Report (KNE 110 - 100 ppl) | | | | | | | | | | | | | | | | | | | | |
| 7-23 10am | | | | | | | | | | | | | | | | | | | | | |
| 7-23 10:30am | | | | | | | | | | | | | | | | | | | | | |
| 7-23 11am | | | | | | | | | | | | | | | | | | | | | |
| 7-23 11:30am | | | | | | | | | | | | | | | | | | | | | |
| 7-23 12pm | Lunch (23LUN) (430 ppl) | | | | | | | | | | | | | | | | | | | | |
| 7-23 12:30pm | | | | | | | | | | | | | | | | | | | | | |
| 7-23 1pm | | | | | | | | | | | | | | | | | | | | | |
| 7-23 1:30pm | | | | | | | | | | | | | | | | | | | | | |
| 7-23 2pm | Cosmic (23W) (KNE 130 - 172 ppl) | | | | | | | | | | | | | | | | | | | | |
| 7-23 2:30pm | | | | | | | | | | | | | | | | | | | | | |
| 7-23 3pm | | | | | | | | | | | | | | | | | | | | | |
| 7-23 3:30pm | Computing (172 ppl) | | | | | | | | | | | | | | | | | | | | |
| 7-23 4pm | | | | | | | | | | | | | | | | | | | | | |
| 7-23 4:30pm | | | | | | | | | | | | | | | | | | | | | |
| 7-23 5pm | | | | | | | | | | | | | | | | | | | | | |
| 7-23 5:30pm | Quantum Information Science in HEP | | | | | | | | | | | | | | | | | | | | |
| 7-23 6pm | | | | | | | | | | | | | | | | | | | | | |
| 7-23 6:30pm | | | | | | | | | | | | | | | | | | | | | |

We have two 4-hour sessions for the early career content talks. It is unfortunate that these are in parallel, but this was the best we could do. Once the abstracts are received we will try to group these by content such that most people will be more interested in one or the other session.

We also have x-frontier meetings: NF-CF-IF on dark matter detector synergies, NF-TF on the neutrino theory network, NF-IF instrumentation for neutrino experiments

July 24

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|--------------|---|---|-------------------------------------|--|--|---|---|-----------------------|--|--|---|---|---|---|--|--|--|--|--|--|--|--|--|--|
| 7-24 9:30am | | | | | | | | | | | | | | | | | | | | | | | | |
| 7-24 10am | AF All-Frontier (KNE 120 - 150 ppl) | AF Success Stories from AF (22D) (30 ppl) | IF Report (24D) (JHN 102 - 100 ppl) | NF Community Engagement Success Stories (22I) (20 ppl) | NF Early Career Presentations (Topic 3) (20H) (30 ppl) | NF Early Career Presentations (Topic 4) (20J) (JHN 175 - 60 ppl) | TF Discussion and frontier reports (19P) (KNE 220 - 175 ppl) | UF UF6 (23B) (25 ppl) | XF AF-CompF Cross-cutting issues (22E) (JHN 075 - 70 ppl) | XF AF-RF cross-cutting issues (22B) (40 ppl) | XF NF-CF Neutrino mass scale with beta decay kinematics (22C) | XF NF-CF-TF high energy and ultrahigh energy astrophysical | XF RF-IF RF1 Discuss picosecond detectors - fast | XF RF-NF RF5 to discuss CLFV and neutrinos - mu2e and facilities (24A) | | | | | | | | | | |
| 7-24 11am | | | | | | | | | | | | | | | | | | | | | | | | |
| 7-24 11:30am | | | | | | | | | | | | | | | | | | | | | | | | |
| 7-24 12pm | Lunch (24LUN) (430 ppl) | | | | | | | | | | | | | | | | | | | | | | | |
| 7-24 12:30pm | | | | | | | | | | | | | | | | | | | | | | | | |
| 7-24 1pm | | | | | | | | | | | | | | | | | | | | | | | | |
| 7-24 1:30pm | | | | | | | | | | | | | | | | | | | | | | | | |
| 7-24 2pm | Snowmass Early Career (24S) (KNE 130 - 430 ppl) | | | | | | | | | | | | | | | | | | | | | | | |
| 7-24 2:30pm | | | | | | | | | | | | | | | | | | | | | | | | |
| 7-24 3pm | Instrumentation Awards (129 ppl) | Underrepresented Minorities (KNE 130 - 129 ppl) | | | | | | | | | | | | | | | | | | | | | | |
| 7-24 3:30pm | | | | | | | | | | | | | | | | | | | | | | | | |
| 7-24 4:30pm | | | | | | | | | | | | | | | | | | | | | | | | |
| 7-24 5:30pm | DOE NSF FNAL Director and other US Labs | | | | | | | | | | | | | | | | | | | | | | | |
| 7-24 6pm | | | | | | | | | | | | | | | | | | | | | | | | |
| 7-24 6:30pm | | | | | | | | | | | | | | | | | | | | | | | | |
| 7-24 7pm | | | | | | | | | | | | | | | | | | | | | | | | |
| 7-24 7:30pm | | | | | | | | | | | | | | | | | | | | | | | | |

We have two 2-hour sessions for the early career content talks. It is unfortunate that these are in parallel, but this was the best we could do. Once the abstracts are received we will try to group these by content such that most people will be more interested in one or the other session.

Community engagement success stories: currently imagining a talk on the Black Hills history and SURF outreach program for part of this – other ideas very welcome

We also have x-frontier meetings: NF-CF on neutrino mass scale, NF-CF-TF on high energy and ultra-high energy astrophysical neutrinos, RF-NF on CLFV and neutrinos

The amount of parallelism on this day is unfortunate, but hopefully these are mostly orthogonal topics. We will need to choose the early career content carefully for this day to minimize conflicts.

Plenaries

- Each frontier is assigned one “full plenary” and one “semi-plenary” where the latter is shared with one other frontier
 - Each of these sessions is 90 minutes
 - The semi-plenary sessions are in separate rooms, so attendees will need to choose one or the other (or possibly hop between)
 - Our semi-plenary is opposite RPF – we understand they plan a 45 min talk about DM at accelerators, and then a 45 min roundtable on AMO, EDMs, other small scale precision tests
 - We are strongly encouraged to have at least 20 minutes of “interactive” content in each session (questions, panels, etc)
- Initial ideas for NF plenaries – Kate, Patrick, and Elizabeth have been discussing, but have not yet fully converged, input very welcome
 - Full plenary “Big Picture Neutrino Physics” – 3 speakers addressing the major physics topics in NF and how they fit in to all of particle physics, with time for questions – similar to NF colloquia except even more high level
 - Semi-plenary: “Progress and Plans” – panel discussion with FAQ submitted by community, focused on more practical/strategic matters

Early Career Content Parallels

- Abstract submission here:
https://docs.google.com/forms/d/e/1FAIpQLSeGD-4h84Z07RAIKN7_q4nHOFmBagaa0ThW7veN_2PwvA_E_Q/viewform
- Thank you to Jacob for taking the lead on abstract review
 - Volunteers to assist very welcome
- Please spread the word that this is the only opportunity for contributed content at CSS and encourage early career folks to submit abstracts
- We have 12 hours of session allotted for these talks – if we receive an overwhelming number of abstracts, we can have some be flash talks

Next Steps

- Indico not yet available, but expected soon
- Will assign several TGCs as conveners of most parallel sessions
 - Some sessions are obviously linked to a particular topical group, so we'll just ask you to self-organize which of you is convening which session
 - For more general sessions, we'll be looking for volunteers
- Please start thinking about what talks/panels/etc are needed for parallel sessions associated with your topical group and who you might invite to speak
 - We're not 100% ready to start issuing invitations, but will need to do so very soon as early-bird registration currently ends on June 5