

# Snowmass Program Committee Meeting

June 29, 2022

J. Butler, Fermilab

# Google Doc for Session Information

- <https://docs.google.com/document/d/11F9W5JwVZLp9JfUN7EhVUg5orycYMNOO36i1saqoFrg/edit#>
- Index of topics:
  - I. Suggestions for Plenary Sessions Organized by Frontiers (and Snowmass Early Career)
  - II. Suggestions for Plenary Sessions Organized by the Program Committee
  - III. Status of Topical Subgroup report Submissions
  - IV. Link to list of proposed people to invite – Google doc
    - <https://docs.google.com/document/d/1gBI3HHLDCG89V93byxzpyeQf66zl39pElwREGYcsCTY/edit?usp=sharing>
  - V. Participants - link to google doc
    - <https://seattlesnowmass2021.net/participantList/>

# Day 1 Agenda

- **09:00** – 9:30:
- CSS Welcome and meeting logistics 15 minutes – G. Watts and Shih-Chieh Hsu
  - UW Welcome (UW Vice Provost of research) (5 min)
  - UW Welcome (UW Dean of Arts and Sciences) (5 min)
  - UW Welcome (UW physics department Chair) (5 min)
- 09:30 – 09:45: Introduction and Organization, DPF (J. Butler)
- 09:45 – 10:15: Two frontier workplans
  - Accelerator (15 min)
  - Community Engagement (15 min)
- 10:15 – 10:45 Coffee break
- 10:45 – 11:30: Three frontier workplans
  - Computational (15 min)
  - Cosmic (15 min)
  - Energy (15 min)
- 11:30 – 12:00: Vision Talk (Hitoshi Murayama)
- 12:00 – 14:00: Lunch
- 14:00 – 14:30 Two Frontier Workplans
  - Instrumentation (15 min)
  - Neutrino (15 min)
- 14:30 – 14:45 Early Career viewpoint (**pending**)
- 14:45 – 15:15 Science **talk [What is the current program, what is the timeline for projects undertaken by last round of decisions/P5]**
- 15:15 – 16:00 Three frontier Workplans
  - Rare Decays and Precision Measurements (15 min)
  - Theory (15 min)
  - Underground Facilities (15 min)
- 16:00 – 16:30: Coffee break
- 16:30 – 18:30:
  - Snowmass/P5 2013/2014 retrospective, lessons learned
    - Perspectives from Snowmass to P5 in 2013/14” (Steve Ritz) - 20 min
    - Perspectives from NSF (Jim Shank) – 25 min
    - Perspectives from DOE (Harriet Kung).- 25 min
    - Perspectives from Fermilab (Lia Merminga) - 20 min
    - Perspectives from HEPAP (JoAnne Hewett) - 20 min
    - Questions/discussion – 20 min

	Sunday, July 17	Monday, July 18	Tuesday, July 19	Wednesday, July 20	Thursday, July 21	Friday, July 22	Saturday, July 23	Sunday, July 24	Monday, July 25	Tuesday, July 26	Wednesday, July 27		
	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Day 8	Day 9	Day 10			
07:30 - 08:00 AM	Registration	Parallel	Parallel	Parallel	Parallel	Parallel	Parallel	Parallel	Snowmass Frontier Summaries	Infrni Benchmark	in the scheduel and afor the mtend		
08:00 - 08:30 AM										NAS EPP Decadal Study			
08:30 - 09:00 AM	Introductory Plenary									Snowmass Frontier Summaries		Snowmass Workshop Summary	Closing remarks
09:00 - 09:30 AM													
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12:30 - 01:00 PM	Lunch	Lunch, Poster & Exhibit	Lunch, Poster & Exhibit, and FOA/DOE General Meeting	Lunch, Poster & Exhibit and NSF General Meeting	Lunch, 1) DOE Prgrm Managers ,Astrophysics,2) NSF Special PI meeting	Lunch,DOE Prgrm Managers 1) Energy 2) Theory	Lunch and Communicating HEP to the public and the govt	Lunch and COVID Roundtable, lessons (to be) learned					
01:00 - 01:30 PM	Introductory Plenary	Parallel 1: AAML	Panel: Careers and Training the Next Generations	Parallel 1: Neutrino; Parallel 2: Rare processes	Colloquium on Rare Processes and Precision Measurements	Colloquium on Underground Physics	Colloquium on Energy Frontier	Presentation: Snowmass Early Career	Panel: Interconnections with other fields				
02:00 - 02:30 PM		Parallel 2: Underground Science											
02:30 - 03:00 PM	Coffee	Parallel 1: The next accelerators; Parallel 2: LQCD	Parallel 1: Lepton Colliders Parallel 2: Cosmic	Colloquium on Instrumentation	Colloquium on new Accelerators and R&D	Colloquium on Theory	Colloquium on Computing	Parallel 1: Underrepresented Minorities; Parallel 2: Instrumentation projects	Coffee				
03:00 - 03:30 PM									Talks: national, Intemational Leaders				
03:30 - 04:00 PM	If	Coffee	Coffee		Coffee	Coffee	Coffee	Coffee					
04:00 - 04:30 PM													
04:30 - 05:00 PM		DEI: Talks and Panel	Colloquium on Community Engagement		Colloquium on Cosmic Frontier	Colloquium on Neutrino Physics	Quantum Information Science in HEP	talks: DOE, NSF, FNAL Director, other US labs	Panel International Status and Plans				
05:00 - 05:30 PM													
05:30 - 06:00 PM		Reception and Poster and Industry	Industry Networking	Adam Riess Public Lecture	Physics Slam								
06:00 - 06:30 PM													
06:30 - 07:00 PM													
07:00 - 07:30 PM													
07:30 - 08:00 PM													
08:00 - 08:30 PM						Conference Dinner	ColliderScope						
08:30 - 09:00 PM													
09:00 - 09:30 PM													
09:30 - 10:00 PM													
10:00 - 10:30 PM													
10:30 - 11:00 Pm													

Notes:  
 1) The DOE and NSF Program Managers will hold talks and Q&A with their PIs and will meet with individual PIs. Days and times to be announced.  
 2) The order of the talks on Monday July 25, may change

**Preliminary**  
 last updated June 26, 2022

# General Talks

- July 18: DEI (K. Assamagan, Mu-Chun Chen)
- July 19: Careers and training the next generation (P. Merkel, S. Lund)
- July 23: Quantum Science and Technology (M. Spiropulu, M. Savage)
- July 23: Communication HEP to the public and the Government (K. Jepson, B. Quinn??)
- July 24: Possible lunch roundtable on COVID (?,?)
- July 25: Connection with other disciplines (P. Cushman, G. Farrar)

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# Agency Meetings

- DOE

- Program Manager Meetings

- July 19: DOE/FOA General Meeting (G. Crawford)
    - July 21: Astrophysics, cosmology (K. Turner)
    - July 22: Energy (A. Patwa)
    - July 22: Theory (W. Killgore)

- NSF

- July 20: NSF General Meeting (K. Dienes, J. Shank)
  - July 21: NSF PI Meeting (K. Dienes, J. Shank)

Meetings start at 12:15 and end at 13:45

# Indico

- Will be able to enter your session and talks starting tomorrow for
  - Day 1 - workplans
  - Days 2- 8: Frontier plenaries and shared plenaries
    - According to talks entered into the Colloquium Googledock



# Days 2-8

- All frontiers have specified their full plenaries and shared plenaries
  - Still some time allocations missing
  - Please identify your speakers
- “general talks” are circled in slide on slide 4
  - 2/4 have organizers appointed and will circulate abstracts of what they are planning
    - One more has one organizer with a second organizer about to be named
    - The fourth one will be discussed at the SG today
- Agency lunch sessions are circled in purple on slide 6

# Mornings Days 9 and 10

- Talk by Meenakshi and backup
- [https://docs.google.com/document/d/1p604GDokgFwZYde\\_tWBd1lwEzJi4xlSoHAyiboBRINY/edit](https://docs.google.com/document/d/1p604GDokgFwZYde_tWBd1lwEzJi4xlSoHAyiboBRINY/edit)

# Backup Slides

# Day 9,10: Panel 1

## Panel discussion 1:

- **Time allocated: 1.5 hours**
- **Frontiers: CF, EF, NF, RPF, TF - each Frontier gets 7 minutes**
- **Title: Science Highlights from the Frontiers**
- **Abstract:** In this discussion, each of the Frontiers gives 5 slides in 5 minutes summary of the physics highlights / Big ideas, which defines their vision for 2025-2035 and 10 years after 2035. These physics highlights could be followed by a one slide summary on experiments proposed to investigate them and another slide which shows their proposed timelines (timelines=R&D, construction and data collection). Each Frontier should comment if any of the physics highlights do not map on the P5 drivers. Also state which P5 science drivers are related to the Frontier. The collective physics highlights may reaffirm the P5 science drivers or a need to extend them, which should be stated as part of the conclusion.
  - The presentations will be followed by a discussion, with questions collected ahead of time.
  - The presentations from each frontier should be posted within two days of their Frontier plenary session.

# Day 9,10: Panel 2

## Panel discussion 2:

- **Time allocated: 1.5 hours**
- **Frontiers: EF, CF, NF, RPF, AF - each Frontier gets 7 minutes**
- **Title: Large Experiments/Facilities and the proposed timelines**
- **Abstract:** Drawing on the proposed experiments and facilities, a 5 min 5 slide presentation from each participating Frontier on
  1. Which physics goal(s) does the facility/experiment support
  2. Elaborate on the timelines for R&D (machine and detector), construction and data collection
  3. Discuss machine and design challenges which have been solved and make the facility viable in the near future. [2025-2035]
  4. Discuss machine and design challenges which still need to be solved and proposed timeline for the R&D. Would these be in the 2025-2035 frame, or are they severely technologically limited and remain as long term challenges to be embarked upon ie, 2035+?
- The presentations will be followed by a discussion, with questions collected ahead of time.
- The presentations from each frontier should be posted within two days of their Frontier plenary session.

# Day 9,10: Panel 3

## **Panel discussion 3:**

- **Time allocated: 1 hour**
- **Frontiers: CF, NF, RPF, UF - each Frontier gets 5 minutes**
- **Title: Mid and Small scale Experiments/Facilities and the proposed timelines**
- **Abstract: Same as for panel 2 above, and add discussion on balancing these needs with large experiments.**
- The presentations will be followed by a discussion, with questions collected ahead of time.
- The presentations from each frontier should be posted within two days of their Frontier plenary session.
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# Day 9,10: Panel 4

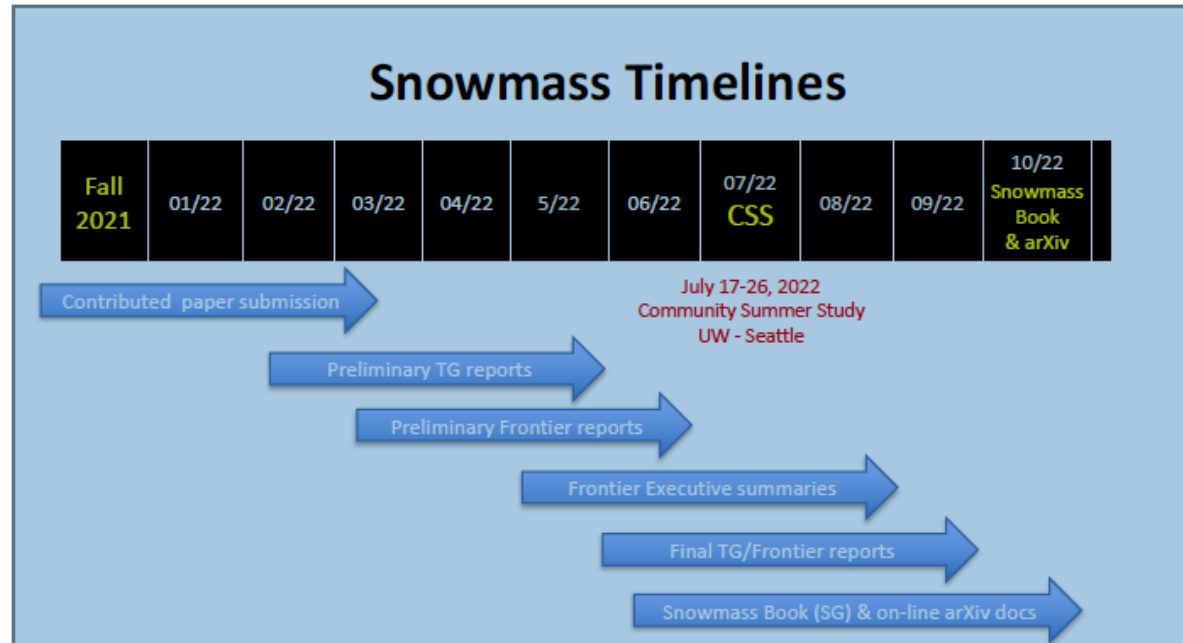
## Panel discussion 4:

- **Time allocated: 1 hour**
- **Frontiers: AF, CF, CEF, COMPF, IF, TF - each Frontier gets 5 minutes**
- **Title: Enabling HEP Research**
- **Abstract:** Each Frontier describes briefly ( 5 min 5 slide presentation )
  - their goals and priorities
  - critical R&D or infrastructure needed during 2025-2035 to support and enable the physics vision discussed during panel 1 and will benefit from targeted funding.
  - R&D or infrastructure needs to support the proposed physics measurements in 2035+ and has time to be developed by next P5.

[one assumes that the blue sky R&D and its needs are already discussed in other plenaries]

- Each Frontier should comment if any of their goals do not map on the P5 drivers. Also state which P5 science drivers are related to the Frontier.
  - The presentations will be followed by a discussion, with questions collected ahead of time.
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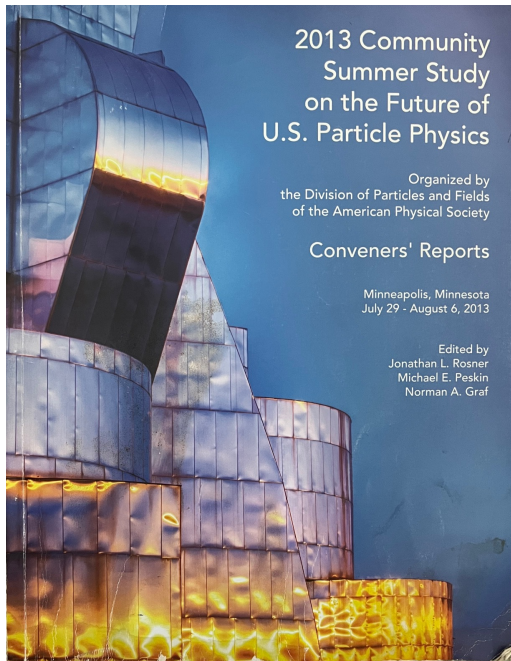
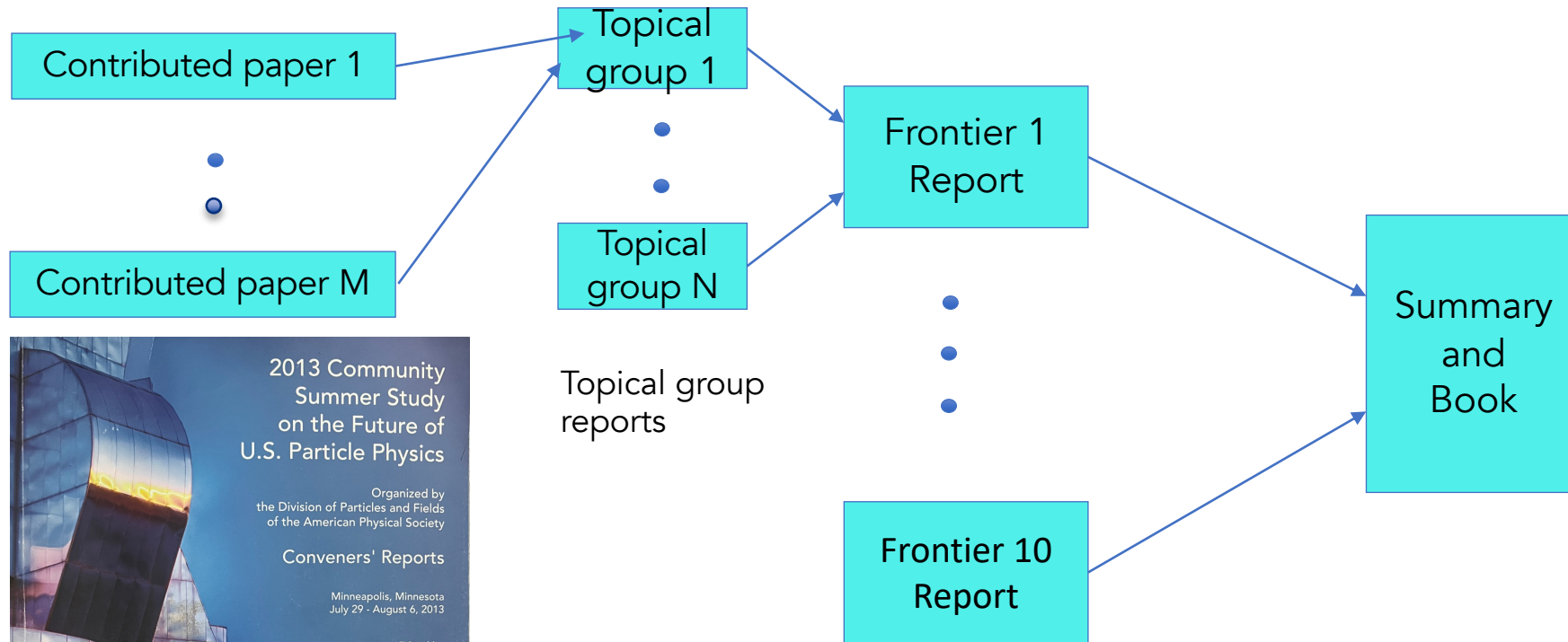
# Timeline for Snowmass Book



- **March 15: Contributed papers (a.k.a. White Papers)**
- **May 31: Preliminary Topical Group Reports**
- June 30: Preliminary Frontier Reports
- **July 17 – 26: Converge on reports for all the frontiers and produce executive summaries representing the views of their communities and providing the basic input needed for P5**
- September: draft Executive Summary and Report Summary
- October- November: Snowmass Book finalized and ready for submission



# The Snowmass REPORT - 2021



- Report cover from Snowmass 2013, report is~ 350 pages
- The new report is expected to be ~500 pages
- All Contributed Papers will remain part of the permanent record of Snowmass

# Writing the summary

- We will set up a drafting team
- They will probably have to work mornings and evenings
- Will need some small (class)rooms to meet periodically

# Notes

- Lunch break is two hours
- There is a 30-minute coffee break in the afternoon
- **Some of the evening events have been moved around and their starting time and duration may be changed to make sure that there is adequate time between the afternoon session and the event, and the event is placed appropriately for the intended audience.**
- Some rest and relaxation time is added on Wednesday, Friday, and Sunday
- I think some of the evening activities should be moved 30-60 minutes later

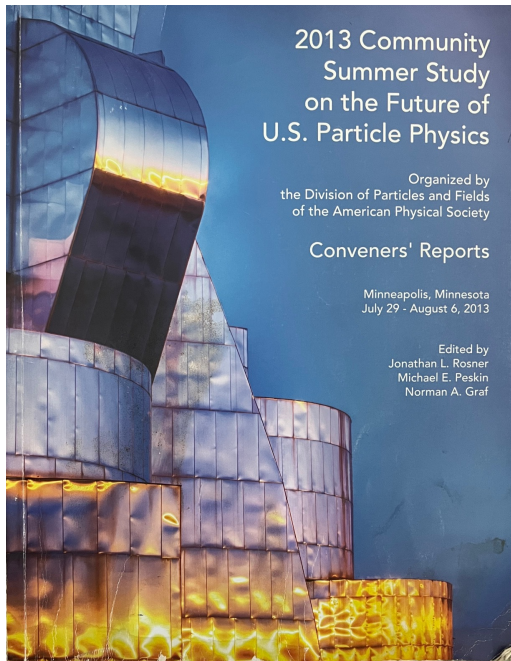
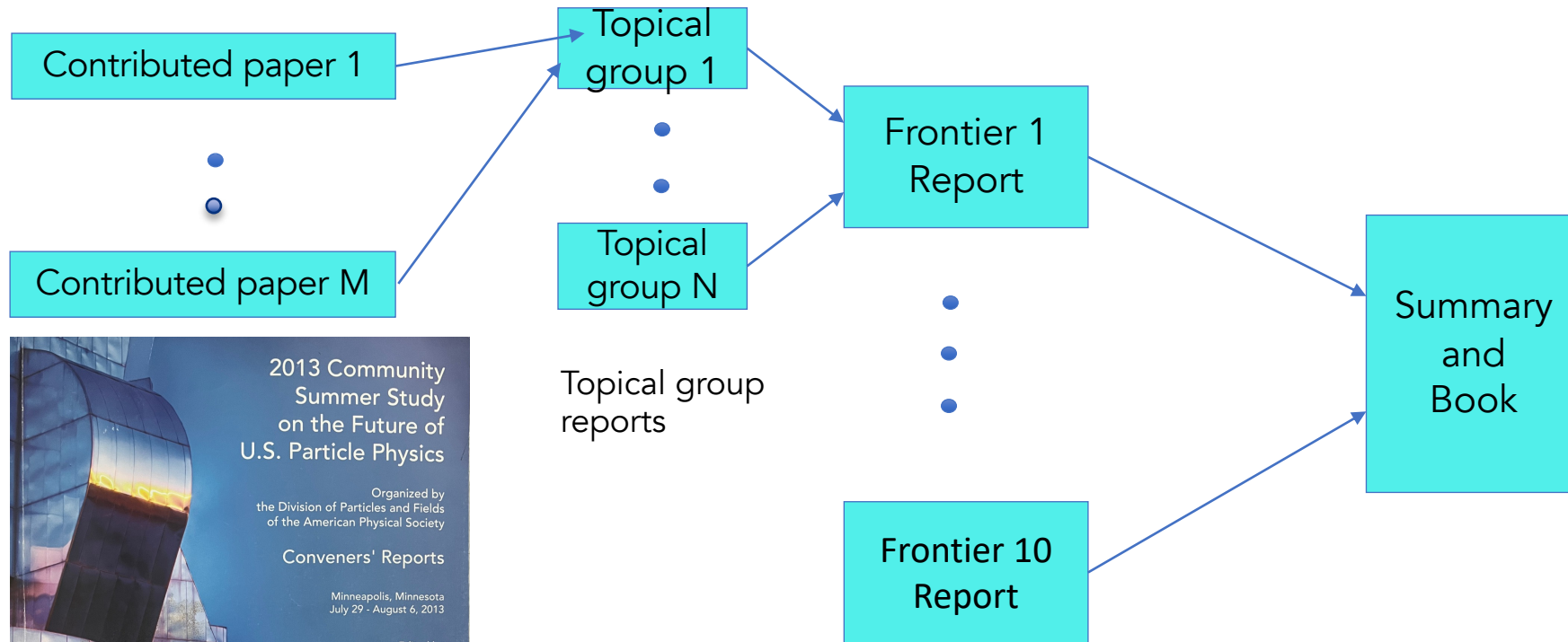
# Suggestions for Plenary Sessions Organized by the Program Committee – Some examples

- RPF
  - Colloquium 1 (**full plenary block**):
    - Flavor physics and QCD
    - Discrete symmetries, baryon, and lepton number violation
    - Dark matter and rare processes
  - Colloquium 2 (**shared block**):
    - RPF+AMO
- CF
  - Colloquia 1: Dark Matter as a Science driver for fundamental physics (community wide, with representatives from energy, rare processes, theory, and neutrino, ~3 hours).
  - Colloquia 2: Cosmic Probes of Fundamental Physics (community wide, with representatives from energy, rare processes, theory, and neutrino, ~2 hours)
- CEF
  - Colloquium 2.5h. CEF will propose the topics and format after their April 29 meeting. This could be arranged as a panel discussion.
- IF
  - Special CPAD Awards ceremony with invited talks by 2021 DPF Instrumentation Award winners and GIRA award winners, highlighting recent achievements in instrumentation and current key challenges, as well as career pipeline
  - Colloquium: motivational talks about direction, technological key issues, career pipeline, facilities

<https://docs.google.com/document/d/11F9W5JwVZLp9JfUN7EhVUg5orycYMNOO36i1saqoFrg/edit>

Snowmass SLACK channel: ssss-program-committee

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