

The logo for SnowMass2021 is displayed in a stylized, cursive font. The word "Snow" is in a light blue color, "Mass" is in a light orange color, and "2021" is in a light yellow color. The entire logo is set against a dark grey rectangular background.

SnowMass2021

CPM – 179 - Targets and Sources organization with contributors

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The slide features a decorative design of red lines. A horizontal line extends from the left edge to a red dot. From this dot, a line goes up and to the right to another red dot. From the second dot, a horizontal line extends to the right edge. A third line goes from the top edge down to the second dot. A fourth line goes from the bottom edge up to the first dot. These lines form a series of connected segments that create a stylized, abstract shape.

DPF Core Principles and Community Guidelines (CP&CG)

- By participating in this meeting, you agree to adhere to the CP&CG
 - **Respect and support community members**
 - **Commit to constructive dialogue and take initiative**
 - Details of what this means, expectations for behavior, and accountability procedures are provided in the CP&CG document linked at:
<https://snowmass21.org/cpcg/start>
- Everyone is invited to invoke the CP&CG as needed to encourage constructive and supportive collaboration
- The conveners of this meeting are your recommended first point of contact for reports of CP&CG violations occurring here
 - The conveners have received training in the CP&CG and how to handle reports
 - The CP&CG accountability procedure is designed to encourage early intervention and is flexible enough to appropriately address issues ranging from the discourteous to the egregious
 - Please do not hesitate to contact us!
- Snowmass is most successful when everyone's voice can be heard!

SnowMass Working Groups

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1. Energy Frontier (EF)
2. Neutrino Physics Frontier (NF)
3. Rare Processes and Precision Frontier (RF)
4. Cosmic Frontier (CF)
5. Theory Frontier (TF)
6. Accelerator Frontier (AF)
7. Instrumentation Frontier (IF)
8. Computational Frontier (CompF)
9. Underground Facilities (UF)
10. Community Engagement Frontier (CommF)

- AF1: Beam Physics and Accelerator Education
- AF2: Accelerators for Neutrinos
- AF3: Accelerators for EW/Higgs
- AF4: Multi-TeV Colliders
- AF5: Accelerators for PBC and Rare Processes
- AF6: Advanced Accelerator Concepts
- **AF7: Accelerator Technology R&D**
 - RF
 - Magnets
 - **Targets/Sources**

Community Planning Meeting

- Goal is to develop plans for the next 8 months
 - Develop plans and steps to take between October 2020 and the Snowmass Community Study in July 2021, leading to a final report in October 2021.
- Opportunity to engage the accelerator community in the Snowmass process
 - Both informational and working sessions
 - Chat rooms as well for those wanting less structured discussion
- Identify issues that are needed for you to make progress
 - Clarify physics/motivation/opportunities with cross-Frontier meetings
 - Have cross-topical group meetings to define needs on both sides

Goals of Session 179 – AF7ts with contributors

- Present the topics determined from the LOIs
- Discuss the different liaisons with other frontiers that needs to be established
- Discuss the planning of the workshops

Your inputs are keys for SnowMass'21 success!!



We want the community to be engaged rather than few participants!



We have one hour sharp!

Targets-Letter of Intent Received for SnowMass'21

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- A total of 19 LOIs on targets were received from a wide range of facilities
- From the LOIs, the following topics were identified for Targets R&D:
 - Material Studies to Extend Radiological Material Science
 - Modelling
 - Novel Materials and Concepts
 - Rad-Hard Instrumentation
 - Remote Handling and Operations
 - Specialized “Physic” target

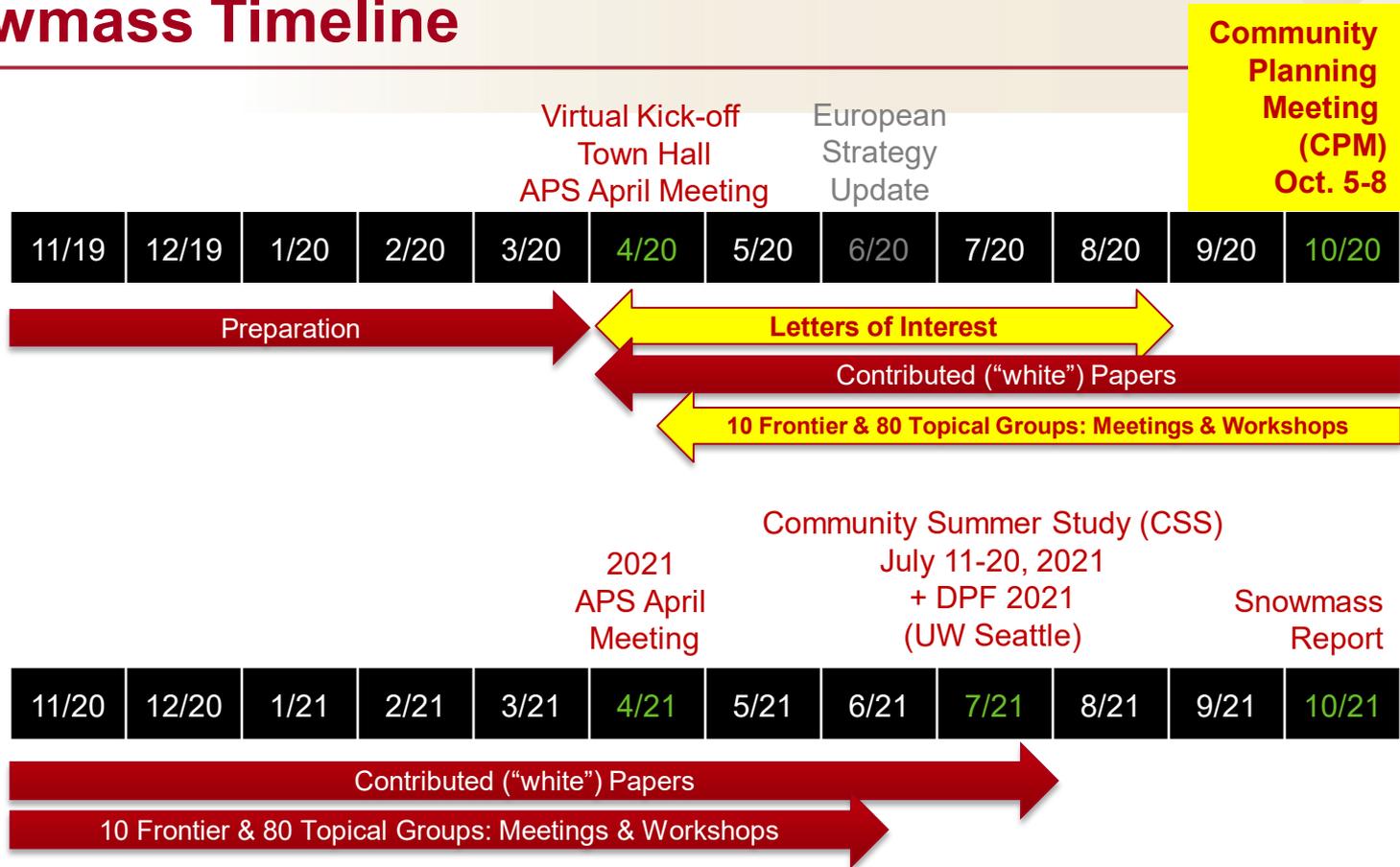
Liaisons Identified

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- Accelerator Frontier AF (should provide most of targets requirements):
 - AF2 Accelerators for Neutrinos
 - **61** – AF2-AF7-NF09: Energy and Power and Time structure goals for Neutrino Frontier programs, Today 1:00-2:30
 - AF3 Accelerators for EW/Higgs
 - AF4 Multi-TeV Colliders
 - **184**. Sources and targets for future accelerators; Tomorrow 1:00-2:00
- Rare Processes and Precision Frontier (RF)
 - RF5: Charged Lepton Flavor Violation (electrons, muons and taus)
- Community Engagement Frontier
 - CommF1 Applications & Industry
- Computational Frontier:
 - CompF2: Theoretical Calculations and Simulation
 - CompF3: Machine Learning
- Instrument Frontier

Snowmass Timeline

Snowmass 2021



Targets-Proposed work for the next 8 months: 3 (or 4) workshops

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- Advanced in Material Science:
 - Irradiation Facilities
 - PIE
 - Novel Materials
- Advanced in Modelling and Instrumentation
- New technologies
 - Remote handling
 - New fabrication technique for targets
 - New target designs
- Have a Town Hall Meeting early in the process (November-December 2020)
- Independent workshops
 - Could be a satellite of existing workshops such as
 - High Power Targetry Workshop (Japan in May 2021)
 - RaDIATE annual collaboration Meeting (BNL, Spring 2021?)
 - Modeling and instrumentation could be a workshop organized by ORNL/SNS

Preliminary Snowmass Timeline / Process

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Starting point for discussion with the community during CPM

