

# Seattle Snowmass 2022

S.-C. Hsu

G. Watts



# Basics Setup

- Website: <http://seattlesnowmass2021.net/>
  - Anyone can contribute changes by submitting a PR to <https://github.com/gordonwatts/seattlesnowmass2021>
- Dates are fixed: July 17-26 (10 Days)
  - Planning for ~700 people
  - Flexibility to increase that up to ~1000
  - Finance not well understood yet, but probably down to 500
  - We are aiming for \$800 per person for 10 days before any grants or sponsorship
  - Private, modern dorm rooms (with private shower) close to campus, about \$120 per night.
- Broad Goals:
  - Community Consensus
  - Cross-group Collaboration
  - Paper prep
  - Preparing the story for the P5 hand off

# 700 People in One Place At One Time

This can't be a (giant) zoom meeting, but in person

(plenary status reports bad?)

# That said...

- We will offer support for zoom for the larger group meetings
- Smaller groups and meetings can use their own zoom links if they like
- Presentations over zoom are possible
- Question we've not answered yet, but happy to have input:
  - Do we charge for zoom attendance?
  - We do need to assure enough people show up to make this financially viable.

# COVID-19 Drop Dead Date

- We are already on the hook for conference organization fees
- We will be on the hook for room charges, etc., sometime in late February.
- Many spring meetings are canceling right now
- We will have to make this decision in the middle of winter when COVID-19 will likely be going through the winter surge
- Please get everyone you know and their friends and their friends friends friends friends friends (6-degrees of separation), and David Bowie, vaccinated.

We can't delay this a year, and if this financially falls over there will never be another big physics meeting at UW

# What do we need to decide now(ish)?

- Enough that we can ask the DOE and NSF for funding and give them a “reasonable” budget
- Shape of the 2013 meeting:
  - First day and last 1.5 days were plenaries
  - Mornings were scheduled “formal” parallel sessions. Between 10-15 each morning
  - Afternoons were panel sessions and colloquia, and lots of time for informal get togethers and meetings
    - the reason people traveled
    - rather than just listened on vidyo!
  - Scatter through out were other things – like out reach, etc.
  - Link to Snowmass 2013: <https://indico.fnal.gov/event/6890/>
- Does this shape still make sense?

# Functional...

- First day of plenaries
  - Expectation setting, getting everyone on the same page
- Morning Parallel Sessions
  - Frontiers, and sub-frontier working groups have reports and formal discussions.
  - Status updates on whitepapers and important contributions.
- Afternoons
  - Small number of colloquia on ‘important questions’ – a way to bring people onto the same page
  - Panel Discussions – open questions, things requiring more feedback from the community, presentations of plans that require feedback from the community
- Last 1.5 day
  - Frontier Reports
  - “why particle physics matters”
  - Invited representatives from other regions (Europe, Japan, etc.)
  - Intro by the P5 committee
  - Closeout

8:00 AM → 3:45 PM	Opening Plenary Session		Ted Mann Concert Hall
	Conveners: Prof. JoAnne Hewett (SLAC), Prof. Jonathan Feng (UC Irvine), Prof. Jonathan Rosner (University of Chicago)		
	Remote connection to EVENING plenary	Remote connection to MORNING plenary	
8:30 AM	<b>Welcome and Introduction from the Head of Physics and Astronomy and The Dean of the College of Science and Engineering</b> Speakers: Ron Poling, Steve Crouch	15m	Ted Mann Co...
	Slides		
8:45 AM	<b>Welcome and Orientation</b> Speaker: Prof. D. Cronin-Hennessy (University of Minnesota)	15m	Ted Mann Concert Hall
	Flyer Slides		
9:00 AM	<b>Introduction and Organization from DPF</b> Speaker: Prof. Jonathan Rosner (University of Chicago)	10m	Ted Mann Concert Hall
	Slides		
9:10 AM	<b>Energy Frontier</b> Speaker: Michael Peskin (SLAC)	20m	Ted Mann Concert Hall
	Slides		
9:30 AM	<b>Computing Frontier</b> Speaker: Steven Gottlieb (Indiana Univ.)	20m	Ted Mann Concert Hall
	Slides		
9:50 AM	<b>Intensity Frontier</b> Speaker: Prof. Hendrik Weerts (Argonne National Laboratory)	20m	Ted Mann Concert Hall
	Slides		
10:10 AM	<b>Instrumentation Frontier</b> Speaker: Marcel Demarteau (Argonne National Laboratory)	20m	Ted Mann Concert Hall
	Slides		
10:30 AM	<b>Video Project Announcement</b>	1m	Ted Mann Concert Hall
10:31 AM	Coffee Break		29m Ted Mann Concert Hall (Unive...
11:00 AM	<b>Cosmic Frontier</b> Speakers: Prof. Jonathan Feng (UC Irvine), Prof. Steve Ritz (UCSC and SCIPP)	20m	Ted Mann Concert Hall
	Slides		
11:20 AM	<b>Outreach</b>	20m	Ted Mann Concert Hall
	Slides		
11:40 AM	<b>Capabilities</b> Speakers: Gil Gilchriese, Prof. William Barletta (MIT)	20m	Ted Mann Concert Hall
	Slides		
12:00 PM	Lunch Break		1h 30m Middlebrook Hall (Dorms) (Un...

12:00 PM	Lunch Break		1h 30m Middlebrook Hall (Dorms) (Un...
1:30 PM	<b>Young Snowmass Viewpoint</b> Speaker: Dr Jonathan Asaadí (Syracuse University)	15m	Ted Mann Concert Hall
	Slides		
1:45 PM	<b>DOE Viewpoint</b> Speaker: Jim Siegrist (DOE)	30m	Ted Mann Concert Hall
	Slides		
2:15 PM	<b>NSF Viewpoint</b> Speaker: Dr Saul Gonzalez (NSF)	25m	Ted Mann Concert Hall
	Slides		
2:40 PM	<b>New Fermilab Director</b> Speaker: Nigel Lockyer	35m	Ted Mann Concert Hall
	Slides		
3:15 PM	Coffee Break		30m Ted Mann Concert Hall (Unive...
3:45 PM → 6:00 PM	<b>Colloquium: Dark Matter</b> Convener: Alexander Kusenko (UCLA)		Ted Mann
	Remote Connection		
3:45 PM	<b>Astrophysical Evidence and Particle Candidates</b> Speaker: Prof. Manoj Kaplinghat (University of California, Irvine)	15m	
	Slides		
4:00 PM	<b>Experimental Probes</b> Speakers: Prof. Daniel McKinsey (Yale University), Prof. James Buckley (Washington University)	30m	
	Slides		
4:30 PM	<b>Putting it All Together: Information from Colliders, Space, and Underground</b> Speaker: Prof. Tim Tait (UC Irvine)	15m	
	Slides		
4:45 PM	<b>Tough Questions</b> Speakers: Prof. Daniel McKinsey (Yale University), Prof. James Buckley (Washington University), Prof. Liantao Wang (University of Chicago), Prof. Manoj Kaplinghat (University of California, Irvine), Prof. Tim Tait (UC Irvine)	30m	
	Slides		
5:15 PM	<b>Discussion</b>	45m	
8:00 PM → 10:00 PM	<b>Public Lecture: Supernovae, Dark Energy, and Our Accelerating Universe: Speaker Saul Perlmutter</b> Convener: Prof. Priscilla Cushman (University of Minnesota)		Coffman Union Great Hall

Day 1



### First Day Parallel Sessions

- Capabilities Frontier (all)
- Computing Frontier (all)
- Cosmic Frontier (CF6)
- Cosmic Frontier (CF5)
- Cosmic Frontier (CF3)
- Cosmic Frontier (CF1 & CF4)
- Cosmic Frontier (CF2)
- Energy Fronter Plenary (WG reports)
- Fronter Capabilities: Underground Facilities
- Instrumentation Frontier Parallel (internal Meetings)
- Intensity Frontier (Plenary on Phys Opp at Project X)
- Theory Panel: Discussion of community issues★
- Joint EF and Capabilities Plenary★
- Communication, Edu, Outreach: Policy Makers & the Public
- Advanced Network Services for Experiments

### Last non-Sunday Parallel Sessions

- Baryon Number Violations: Panel discussions (n-nbar)★
- Capabilities Frontier (WP reports)★
- Energy Frontier: Electro weak
- Energy Frontier: Flavor at High Energy
- Energy Frontier: Higgs
- Energy Frontier: New particles, forces, dimensions
- Energy Frontier: QCD
- Joint Instrumentation and Intensity Frontier★
- Intensity Frontier: mu to e gamma and mu to 3 e
- Cosmic Frontier: Plenary (Dark matter)
- Energy Fronter: Top
- Instrumentation Fronter: Speed
- Communication, Edu, Out: Inreach

**Conveners:** Gil Gilchriese, Prof. Michael Dine (University of California Santa Cruz), Prof. Nicholas Hadley (The University of Maryland), Patricia McBride (Fermilab)

8:30 AM	<b>Introduction, Welcome, and Organization</b> Speaker: Prof. Jonathan Rosner (University of Chicago)	🕒 5m	📍 Ted Mann Concert Hall
	Slides		
8:35 AM	<b>Why Particle Physics Matters</b> Speaker: Kathryn Jepsen	🕒 5m	📍 Ted Mann Concert Hall
	Slides		
8:40 AM	<b>Intensity Frontier</b> Speaker: Prof. JoAnne Hewett (SLAC)	🕒 1h 5m	📍 Ted Mann Concert Hall
	Slides		
9:45 AM	<b>Computing Frontier</b> Speaker: Dr Lothar Bauerdick (Fermilab)	🕒 50m	📍 Ted Mann Concert Hall
	Slides		
10:35 AM	<b>Coffee Break</b>	🕒 30m	📍 Ted Mann Concert Hall (Unive...)
11:05 AM	<b>Cosmic Frontier</b> Speakers: Prof. Jonathan Feng (UC Irvine), Prof. Steve Ritz (UCSC and SCIPP)	🕒 1h 5m	📍 Ted Mann Concert Hall
	Slides		
12:10 PM	<b>Lunch</b>	🕒 1h 45m	📍 Middlebrook Hall (Dorms) (Un...)
1:55 PM	<b>Communication, Education, and Outreach</b> Speaker: Prof. D. Cronin-Hennessy (University of Minnesota)	🕒 50m	📍 Ted Mann Concert Hall
	Slides		
2:45 PM	<b>Instrumentation Frontier</b> Speaker: Dr Ronald Lipton (Fermilab)	🕒 50m	📍 Ted Mann Concert Hall
	Slides		
3:35 PM	<b>Coffee Break</b>	🕒 30m	📍 Ted Mann Concert Hall (Unive...)
4:05 PM	<b>HEP and Nuclear Physics: Fundamental Symmetries and Interactions</b> Speaker: Michael Ramsey-Musolf	🕒 40m	📍 Ted Mann Concert Hall
	Slides		
4:45 PM	<b>HEP and Astrophysics</b> Speaker: Prof. Angela Olinto (The University of Chicago)	🕒 40m	📍 Ted Mann Concert Hall
	Slides		

## Day 9 Plenary

**Conveners:** Prof. Howard Haber (University of California, Santa Cruz), Dr Robert Bernstein (Fermilab)

8:30 AM	<b>Capabilities Frontier</b> Speakers: Marc Ross (Fermilab), Prof. William Barletta (MIT)	🕒 1h 5m	
	Slides		
9:35 AM	<b>Energy Frontier</b> Speaker: Prof. Raymond Brock (Michigan State University)	🕒 1h 5m	
	Slides		
10:40 AM	<b>Coffee Break</b>	🕒 30m	
11:10 AM	<b>View from Europe</b> Speaker: Prof. Tatsuya Nakada (EPFL)	🕒 20m	
11:30 AM	<b>View from Japan-Sachiyo Komamiya</b> Speaker: Sachiyo Komamiya (The University of Tokyo)	🕒 20m	
11:50 AM	<b>Summary of Snowmass</b> Speaker: Ian Shipsey (Purdue University)	🕒 40m	
	Slides		
12:30 PM	<b>Moving forward with P5</b> Speaker: Andrew Lankford (UC Irvine)	🕒 10m	
12:40 PM	<b>Summary from DPF Chair</b> Speaker: Prof. Jonathan Rosner (University of Chicago)	🕒 10m	

## Day 10 Plenary

# Other Meetings & Events at same time as Snowmass

- Have some folks with access to training money
  - Possibly bring students by paying for most of their costs (but not 100%)
  - Then they can hang around for snowmass pretty cheaply
- There is an Ann Nelson memorial workshop just before Snowmass starts
  - We do not think there will be overlap on Sunday of our start
- Other meetings are fine – let us know – we will have to work on financing, but in general small rooms for an afternoon aren't expensive