The background features a complex network of thin, overlapping lines in yellow and orange, radiating from a central point. These lines are set against a dark blue field filled with numerous small, scattered red and blue dots, creating a starry or data-like appearance.

# Snowmass Early Career Initiatives

**Cindy Lin, Tiffany Lewis, Garvita Agarwal, & Kristi Engel**

With introductions by Joshua Barrow

# Introduction to Snowmass Early Career

Welcome to the Snowmass Early Career Initiatives' Plenary!

Snowmass Early Career is an early career (or 'Young') community within Snowmass

- Initially formed and structured based on wide community input
- Early Career members self-organized into a variety of Initiatives
  - A functioning adhocracy!
- Membership is wide open! Please join us!
  - All initiatives are actively encouraging greater involvement!
  - First leadership turnover is beginning
  - Many open spots to be filled now or into the future!

# Snowmass Early Career Inreach Initiative

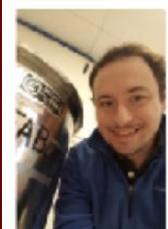
Cindy Lin on behalf of SEC Inreach Group

**Current leaders:** Christian Herwig, Matt LeBlanc

**Email subscription:** [SNOWMASS-EC-INREACH@LISTSERV.FNAL.GOV](mailto:SNOWMASS-EC-INREACH@LISTSERV.FNAL.GOV)

**Slack channel:** #early-career-inreach (please contact current leaders to be added)

**Regular meeting:** Thursdays 13h00m Eastern/12h00m Central on Zoom



# SEC-Inreach

## Professional development and building cohesion within the early career community

### Reaching/engaging all high energy physics early career members

- Introductory workshop series
  - To provide better understanding of the Snowmass process and the goals of each frontiers
- HEP Early-Career Network
  - To facilitate communication and advocacy for common issues
- SEC Wiki Page Update/SEC website
  - <https://usyoungparticlephysicists.github.io/>

### Reaching within SEC and promoting participation

- Coffee Collisions
  - To promote networking, mentorship, and/or social niche
- SEC LOI database
  - To help track the impact of SEC members in the Snowmass process
- Colloquium series
  - To better understand the “big questions” in the fields beyond their own specialty

# Introductory workshop series

## First SEC-wide meeting

Held on July 31st: <https://indico.fnal.gov/event/44627/>

Overview of the Snowmass Process (K. Scholberg):  
<http://cern.ch/go/M6gK>

Introduction to Snowmass Early Career:  
<http://cern.ch/go/PX6W>

Organization and Structure of Snowmass Early Career:  
<http://cern.ch/go/qZR7>

These meetings have been recorded and provide a nice resource for people trying to get involved with the Snowmass process now.

## Frontier Introductions

A series of short introductory talks about each frontier held in August

Aim: help SEC members better engage with the LOI/Snowmass process.

Instrumentation, Cosmic, Energy:  
<https://indico.fnal.gov/event/44675/>

Computational, Community Engagement, Neutrino: <https://indico.fnal.gov/event/44676/>

Accelerator, Underground, Rare Processes & Precision, Theory:  
<https://indico.fnal.gov/event/44677/>

# Facilitate discussions w/in the EC community

## SEC LOI Database

Constructed database of LOI with SEC participation

Main goal is to help track the impact of SEC members in the Snowmass process

Currently ~150 identified

<http://cern.ch/go/8JqB>

## HEP Early-Career Network

Planning to build HEP-wide network of early-career member groups, in order to facilitate communication and advocacy for common issues.

Collaboration with SEC-long term planning

Compiled a list of existing EC groups and point people, in order to form a network between these groups as a starting point:

<http://cern.ch/go/Qfw6>

# Coffee Collisions

Match participants with different career levels for one-on-one coffee chats over video.

Aims to help fill networking, mentorship, and/or social niche left open by current lack of in-person meetings and workshops.

~200 participants

We are currently making matches, and the first meetings should take place before the end of October!

Snowmass Early-Career Inreach presents ...

## Coffee Collisions!



Collide with another Snowmass participant for a coffee to build a new connection. We'll find you someone to talk to, so you can just think about the future of physics!

Participants will be matched based on common interests, but across career stages, institutes and experiments.

Sign up here for a 1-on-1 chat, before 30 September :  
<http://cern.ch/go/D7B6>

*"What proposed accelerators are you interested in?"*

*"What's it like to work at your facility?"*

*"What questions do you want to answer in the next 40 years?"*

*"Want to hear about my sourdough starter?"*

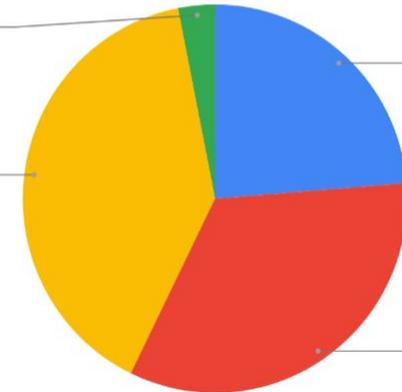
contact: [snowmass-ec-inreach@listserv.fnal.gov](mailto:snowmass-ec-inreach@listserv.fnal.gov)

Undergraduate student  
3.1%

Graduate student  
23.7%

Professor or other senior position  
39.7%

Postdoc  
33.5%



# Big Questions in Particle Physics

Monthly **colloquium series** for SEC members to better understand the “big questions” in the fields beyond their own specialty so they can better engage with the Snowmass process

**Format:** two speakers with different points-of-view share their thoughts about how the field will progress during the next 50 years, followed by discussions

**Friday October 30th @ 12-1:30pm ET: Dark Matter**

<https://indico.fnal.gov/event/45733/>

Speakers: Caterina Doglioni, Chanda Prescod-Weinstein

**November: Neutrino ( $\nu$ -vember)**

Speakers: TBA



**Big Questions in Particle Physics**  
A Snowmass Colloquium Series by SEC-Inreach

Friday October 30th @ 12-1:30pm ET

**Dark Matter**

<https://indico.fnal.gov/event/45733/>

Featuring  
Caterina Doglioni & Chanda Prescod-Weinstein

Image Credit: Tiffany Lewis

50 years down the line, what questions might we hope to answer?  
And what will it take to get there?  
Each month, 2 new speakers share their thoughts, and ask for yours.

Contact:  
Christian Herwig  
therwig@fnal.gov



# Snowmass Early Career Diversity, Equity & Inclusion (SEC-DEI)

Current Leaders:

Vallary Bhopatkar Mateus F. Carneiro Tiffany R. Lewis  
(she/her) (he/his) (she/her)



[vbhopatkar@anl.gov](mailto:vbhopatkar@anl.gov)



[mateusc@fnal.gov](mailto:mateusc@fnal.gov)



[tiffanylewisphd@gmail.com](mailto:tiffanylewisphd@gmail.com)

# SEC-DEI Defined

**SEC-DEI is charged with managing diversity, equity & inclusion in SEC**

- Monitoring and responding to the diversity of leadership and participants
- Creating a safe space for discussion of DEI topics
- Enriching the community through DEI themed activities

**DEI is also a topical group (CEF 03) within the Community Engagement Frontier (CEF), which additionally includes**

- Applications & Industry (CEF 01)
- Career Pipeline & Development (CEF 02)
- Physics Education (CEF 04)
- Public Education & Outreach (CEF 05)
- Public Policy & Government Advocacy (CEF 06)

**SEC-DEI acts as SEC liaison to the DEI topical group. Other CEF topical groups liaise through SEC-CEF.**

# SEC-DEI Current/Past Activities

## LOI Participation

- Discussed and contributed to LOIs organized by CommF3.

## Discuss CommF3 news during our meetings

- Convener meeting updates
- Town Hall topical discussions

## Evaluate the diversity of SEC leadership

- Constructed a 2 part survey for leaders to evaluate the diversity in their own group and provide their personal demographic information
- Discuss the groups' goals for recruiting and diversity, provide resources where we are able.

## Provide resources for the SEC Community

- Anonymous dropbox for community feedback
- Journal Club on DEI topics

# SEC-DEI Upcoming Projects

## Continue to document the diversity of SEC & SEC leadership

- Constructed a 2 part survey for leaders to evaluate the diversity in their own group and provide their personal demographic information
- Produce a report on SEC leadership diversity

## Work with DPF Ethics Committee

- Advertise their reporting structures and the Community Guidelines (CP&CG)
- Continue to give feedback on the CP&CG
- Discuss training options

## Collaborate with other SEC key initiatives

- Long Term Org - ongoing representation
- Inreach - serving the needs of the SEC community

## Survey of Early Career Experience

## Document SEC-DEI projects & activities to guide long-term HEP continuation

# Getting Involved with SEC-DEI

We have an active team of participants on Slack: [#early-career-diversity](#) (contact any of the leaders via message on slack to be added to the private group)  
See also [#commf03-div\\_incl](#) for public topical group discussions beyond SEC.

Listserv: [SNOWMASS-EARLY-CAREER-DEI@fnal.gov](mailto:SNOWMASS-EARLY-CAREER-DEI@fnal.gov)

Regular meetings are **Wed 1pm CDT**, via zoom, and posted on Indico  
(times are subject to change with leadership terms and/or to accommodate the group needs)

SEC-DEI Leaders act as facilitators to produce discussions in the larger group. SEC-DEI decisions are made by consensus of participating members at meetings and via Slack.

We are actively recruiting people who can lead and support current and upcoming projects.

Please join us! We look forward to meeting you!



# Snowmass Early Career Survey Initiative

Garvita Agarwal on behalf of the SEC Survey Team

Visit us at our [Google Site](#)

Current Leaders: [Maria Elidaiana da Silva Pereira](#), [Garvita Agarwal](#)

Contact Persons: [Sam Hedges](#), [Joshua Barrow](#)

Email subscription: [SNOWMASS-EARLY-CAREER-SURVEY@fnal.gov](mailto:SNOWMASS-EARLY-CAREER-SURVEY@fnal.gov)

Slack channel: #early-career-survey (DM contact persons for access)

Regular meetings: Thursdays 4pm ET, via Zoom, agendas on Indico

# PLANS

- Perform a community-wide survey to assess the diversity of the field, future of physics research, career prospects, lifestyle, wellness and social impacts.
- Provide analysis of results in the context of the current social, economic and scientific climate.
- Produce a report to be presented at the 2021 July Snowmass meeting.
- Previous Surveys:
  - Report on the ECFA Early-Career Researchers Debate on the 2020 European Strategy Update for Particle Physics [[arxiv:2002.02837](https://arxiv.org/abs/2002.02837)]
  - Snowmass 2013 Young Physicists Science and Career Survey Report [[arXiv:1307.8080v3](https://arxiv.org/abs/1307.8080v3)]
  - Results of the Survey on the Future of HEP [[arXiv:hep-ex/0108040](https://arxiv.org/abs/hep-ex/0108040)]
- Encourage cross-pollination from other survey-initiatives throughout the Snowmass Process
  - Coffee Collisions, Snowmass CPM registration, Community Engagement survey

# TOPICS

## ➤ Demographics

- Country of residence, Country of citizenship, Career stage , gender etc.

## ➤ Physics Outlook

- Future physics interests, funding etc.
- Please add any Frontier specific questions to the [Google sheet](#); we appreciate it!

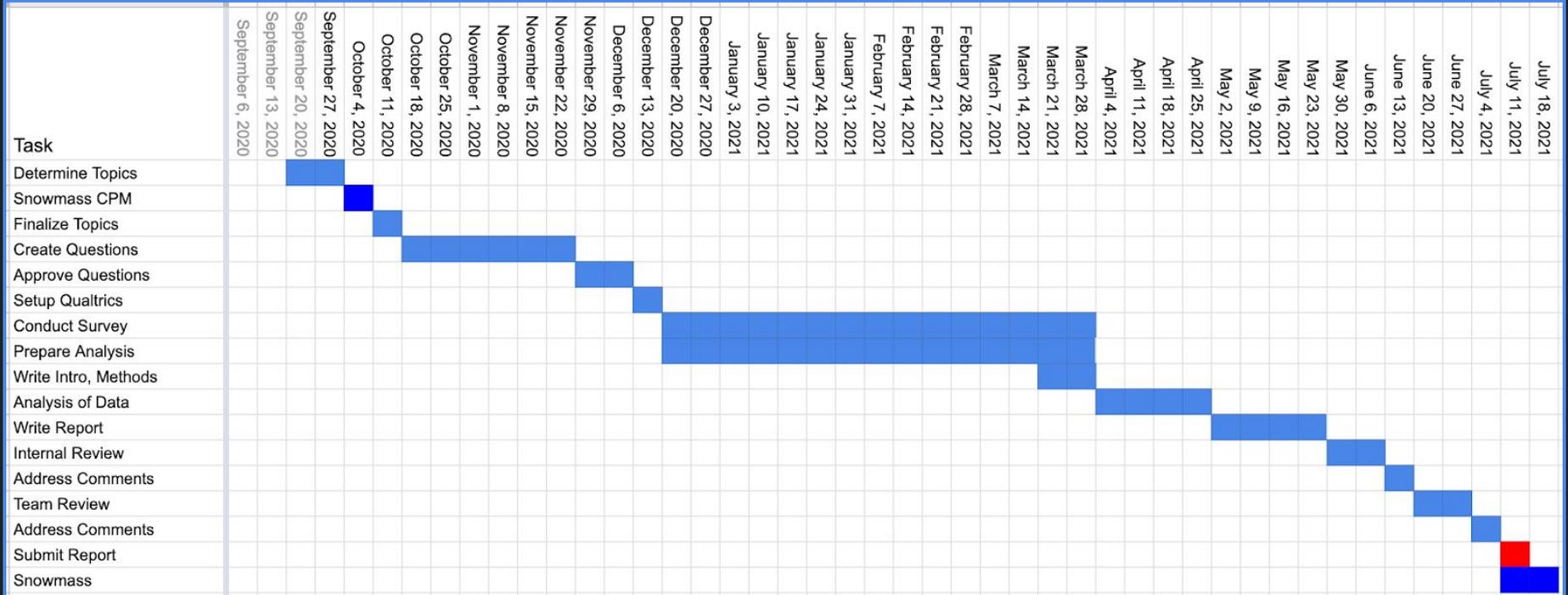
## ➤ Career Paths

- Academic and Non-Academic/Industry
- Past, Present, Future

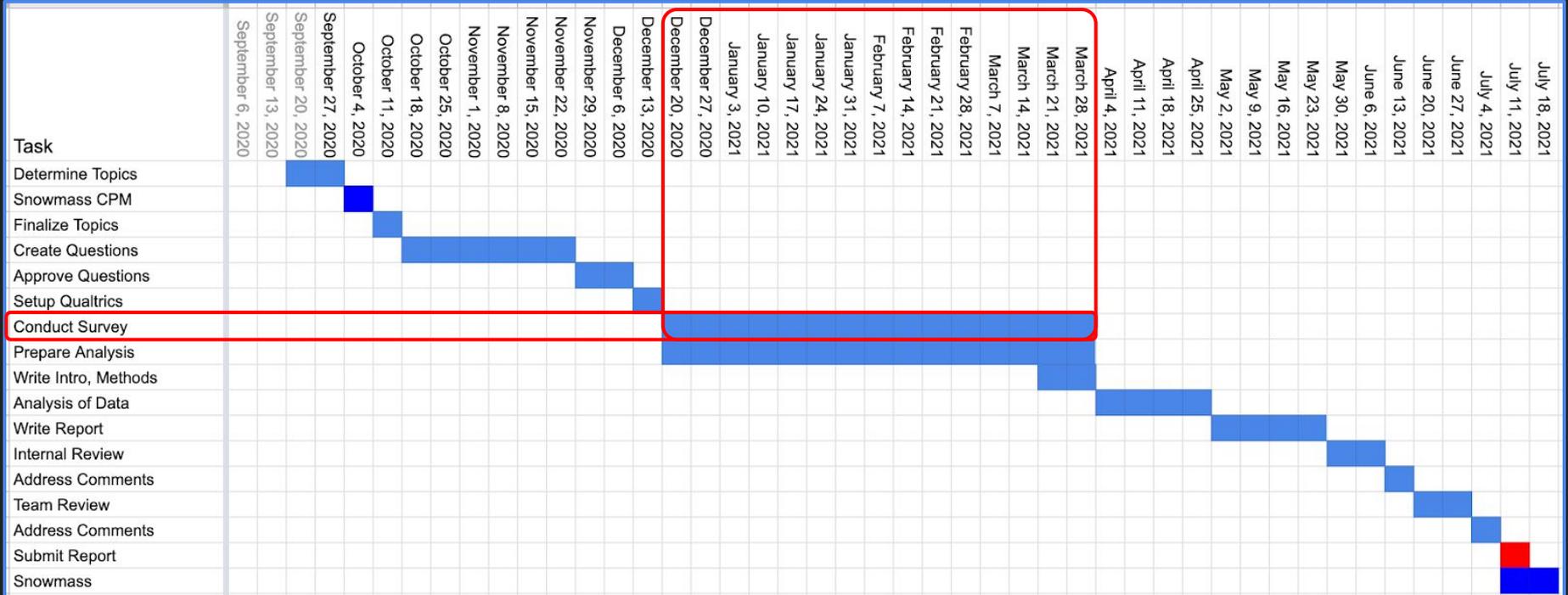
## ➤ Quality of Life and Social Factors

- COVID, immigration, workplace climate, racism and discrimination
- Work hours, overtime, travel, mental/physical/emotional wellness etc.

# TIMELINE



# TIMELINE





Garvita Agarwal



Maria Elidalana da Silva Pereira



Joshua Barrow



Erin Conley



Ivan Lepetic



Samuel Homiller



Tianhuan Luo



Sam Hedges



Mateus F. Carneiro (he/him)



# Snowmass Early Career Long-Term Organization

Kristi Engel for Joshua Barrow, Garvita Agarwal, Pranava Teja  
Surukuchi, Fernanda Psihas, and Manolis Kargiantoulakis

*Please see our associated [Letter of Interest](#)*



# SEC: Long-Term Organization

- Widely supported based on feedback from the community
  - **Need to establish an inclusive and representative organization in the field beyond the Snowmass process**
- Organizational structure and community established by SEC will serve as a starting point for this long-term organization
- Plan to continue and adapt the SEC Inreach, DEI, Survey, and Long-Term Organization key initiatives beyond the Snowmass process
- Will solicit and add new key initiatives as we further develop the long-term structure of the EC community

# SEC: Long-Term Organization (cont.)

- One such initiative is the formation of a network between early career groups. The goals of such a network would be to:
  - Establish and communicate best practices among existing EC groups
    - **Would collectively improve the efficacy of sharing ideas across organizations**
  - Inspire EC members who do not have EC organizations to develop them, and support them in this process
  - **Extend the benefits and opportunities of an EC organization to communities where such organizations are difficult to develop, including colleagues working on theory or in small-scale collaborations**

# SEC: Long-Term Organization (cont.)

- The goals of such a network would be to:
  - **Share announcements and opportunities**, including seminars, job openings, and collective EC initiatives
  - **Facilitate coordinated initiatives** and opportunities that may have been previously out of reach
  - **Enable policies** of mutual respect, inclusivity, equity, justice, human dignity, and freedom of inquiry to be more easily universalized and supported across the field

# SEC: Long-Term Organization (cont.)

- LOI: [SNOWMASS21-CommF2\\_CommF5-049](#)
- Slack channel: [#early-career-org](#)
- Mailing list: [SNOWMASS-EC-LONGTERMORG@fnal.gov](#)
- [Google Form](#): Early-career member feedback & involvement
- [Google Spreadsheet](#): Early-career experimental representatives
- [Website](#): Please join us!

# Snowmass is a *community* process--- Get Involved!

All initiatives need more involvement! Your opinions and assistance are important!

## **Inreach**

*Slack:* #early-career-inreach

*Mailing list:*

[SNOWMASS-EC-INREACH@FNAL.GOV](mailto:SNOWMASS-EC-INREACH@FNAL.GOV)

## **DEI**

*Slack:* #early-career-diversity

*Mailing list:*

[SNOWMASS-EARLY-CAREER-DEI@fnal.gov](mailto:SNOWMASS-EARLY-CAREER-DEI@fnal.gov)

## **Survey**

*Slack:* #early-career-survey

*Mailing list:*

[SNOWMASS-EARLY-CAREER-SURVEY@fnal.gov](mailto:SNOWMASS-EARLY-CAREER-SURVEY@fnal.gov)

## **Long-Term Org.**

*Slack:* #early-career-org

*Mailing list:*

[SNOWMASS-EC-LONGTERMORG@fnal.gov](mailto:SNOWMASS-EC-LONGTERMORG@fnal.gov)

### **DPF Early Career Executive Committee Representatives:**

2020- Sara Simon ([simon.sara.m@gmail.com](mailto:simon.sara.m@gmail.com))

2019- Fernanda Psihas ([psihhas@fnal.gov](mailto:psihhas@fnal.gov))