

# Welcome to the 2023 CSSS!

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(he/him)

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and

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College of the Atlantic

# Overview



- 1 Spacetime: Where we are and how we got here
- 2 Program Goals and Structure
- 3 Community and Collaboration
- 4 Concluding Thoughts

## Location

# Santa Fe, New Mexico, USA Oghá P'o'oge



A place with a long, rich history and a complex present

# Institute of American Indian Arts (IAIA)



To empower creativity and leadership in Native arts and cultures through higher education, life-long learning, and outreach.

## Santa Fe Institute (SFI)

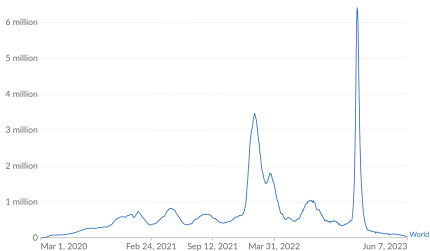


Searching for order in the complexity of evolving worlds.

## COVID-19

### Daily new confirmed COVID-19 cases

7-day rolling average. Due to limited testing, the number of confirmed cases is lower than the true number of infections.



Source: WHO COVID-19 Dashboard

CC BY

### Daily new confirmed COVID-19 deaths

7-day rolling average. Due to varying protocols and challenges in the attribution of the cause of death, the number of confirmed deaths may not accurately represent the true number of deaths caused by COVID-19.



Source: WHO COVID-19 Dashboard

CC BY

This time calls for kindness, generosity, flexibility, care, patience

# Spacetime: CSSS and Me

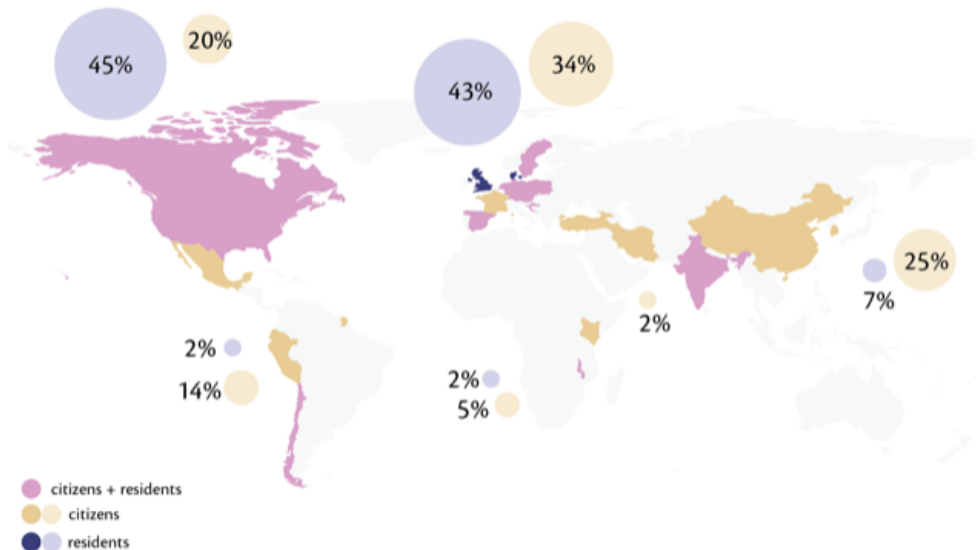
- ▶ SFI has held the CSSS in Santa Fe since 1988<sup>1</sup>
- ▶ SFI has held Complex Systems Schools in China, India, Hungary, and Chile.
- ▶ I attended CSSS in 1996.
- ▶ I taught at (2004-2009) and co-directed (2006-2009) SFI's China CSSS and have directed the Santa Fe CSSS since 2017.
- ▶ Since 1998 I have been on the faculty of College of the Atlantic (Bar Harbor, Maine, USA).

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<sup>1</sup>Except for 2020 and 2021, because of COVID. ☹

# Spacetime: About You

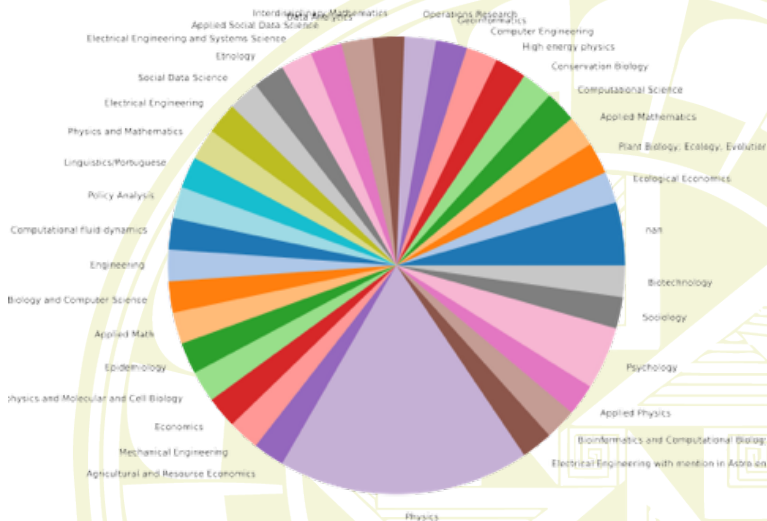
You come from ~20 countries





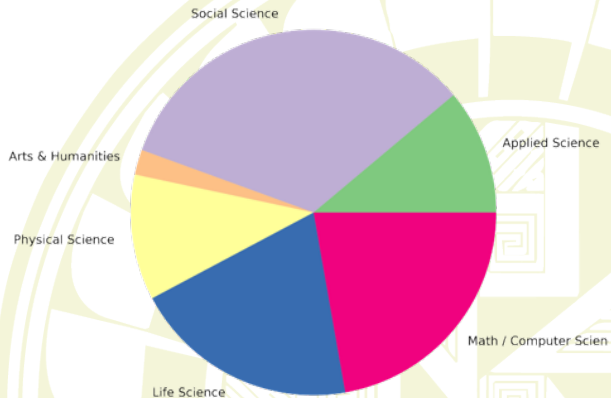
# About You

You have a very very wide range of research interests. Very.



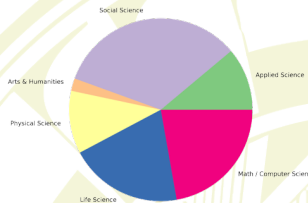
# About You

You have a range of research interests.



# About You: You are likely a misfit

You have a range of research interests



Now that you're here:

- ▶ It's normal to be “weird”
- ▶ You won't be asked, “but is that *really* physics?” or “how is that biology?”

# Purpose and Goals of Summer School

- ▶ Introduce you to some of the methods, tools, theory, and concepts used in complex systems research.
- ▶ Provide an opportunity for you to gain experience collaborating on a transdisciplinary research project.
- ▶ Connect with future colleagues and collaborators and the SFI research community and foster an international network of complex systems scholar.

# Program Structure



1. Seminars, workshops, and discussions
2. Group research projects
3. Coffee conversations, meals, hikes, wanderings, random connections...

# Program Structure: On Being Present

- ▶ Let's be fully present with each other.
- ▶ Minimize distractions, electronic or otherwise.
- ▶ Please do not use laptops during the lectures.

# Program Structure: Group Projects

- ▶ Form teams of 3–6
- ▶ At the end of the program, groups give a presentation and write an abstract
- ▶ Take risks. Experiment.
- ▶ Not all projects will work out. That's ok.
- ▶ The process is more important than the product.
- ▶ Tamara and Santiago will provide more details and guidance throughout.
- ▶ Be intentional.

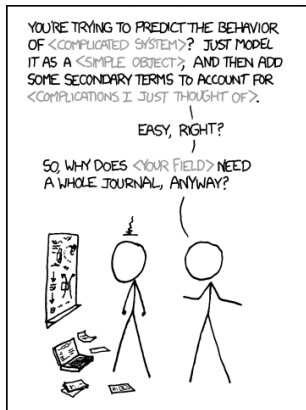
# Communication and Collaboration

Creating a space where all can contribute and flourish takes attention and care.

- ▶ Step up. Step back.
- ▶ Be mindful of gendered communication patterns.
- ▶ Use “I” statements.
- ▶ Gently lean into discomfort.
- ▶ Communication and collaboration are active, shared responsibilities.



# Communication and Collaboration



LIBERAL-ARTS MAJORS MAY BE ANNOYING SOMETIMES, BUT THERE'S *NOTHING* MORE OBNOXIOUS THAN A PHYSICIST FIRST ENCOUNTERING A NEW SUBJECT.

<https://xkcd.com/793/>

## Disciplinary Humility

- ▶ Physicists, please don't do this.
- ▶ Disciplines do not exist in a hierarchy.
- ▶ We all have something to learn from each other.
- ▶ IMO Complex systems should not be the “physics-ization” of all of science.

Also:

- ▶ Interdisciplinary  $\neq$  transdisciplinary

# Respectful Conduct

## No tolerance for harassment

- ▶ Everyone should feel safe and a sense of belonging at the CSSS.
- ▶ SFI has a policy to protect all participants in our programs against harassment, bullying, and assault of any nature, including but not limited to actions motivated by gender.
- ▶ All faculty, staff, and participants – regardless of their institutional affiliation – are subject to, and protected by, this policy.
- ▶ You have reviewed and agreed to follow the policy when you registered. You can find the policy documents in the online course materials.
- ▶ Please share any concerns about harassment or discrimination immediately so that we can take action as appropriate. Any member of the CSSS staff can help, or contact SFI's Title IX Coordinator, Janet Gunn [janetgunn@santafe.edu](mailto:janetgunn@santafe.edu)

I am happy to answer questions or address your concerns privately.

Please find me later to discuss.

# Respectful Conduct

## We are guests of IAIA

- ▶ We are guests in a Native American space.
- ▶ IAIA does not allow alcohol on campus.
- ▶ However, we have been granted a special exception to this policy.
- ▶ Restrict alcohol consumption to the social patio – next to the dorms.
- ▶ SFI and IAIA undergraduate students are sharing the dorms and common areas on campus.
- ▶ Use and possession of cannabis is forbidden at IAIA
- ▶ Please approach the IAIA staff with patience and generosity.

## Building a Community *Here*

- ▶ Take advantage of the incredible facilities at IAIA.
- ▶ Minimize trips off-campus.
- ▶ We will be at SFI on the first three Fridays of the program. That is the only time we should be at SFI.
- ▶ Explore, self-organize, let things emerge.
- ▶ The CSSS and IAIA staff are here to help. Come to us with questions and ideas!

## Concluding Thoughts

- ▶ Engage. Be present. Listen. Connect.
- ▶ Dive in. Explore. Take risks.
- ▶ Sleep. Recharge. Pace yourself: it can be a long 4 weeks.
- ▶ Take care of yourselves, take care of each other.

There is always enough time for the right work. There is a conversation in the room that only these people at this moment can have. Find it.

adrienne maree brown  
*Emergent Strategy*, AK Press (2017)