NASA Exoplanet Science Institute

Welcome to the 20th Sagan Summer Workshop!

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National Aeronautics and Space Administration
Jet Propulsion Laboratory
California Institute of Technology

2020 Sagan Summer Workshop

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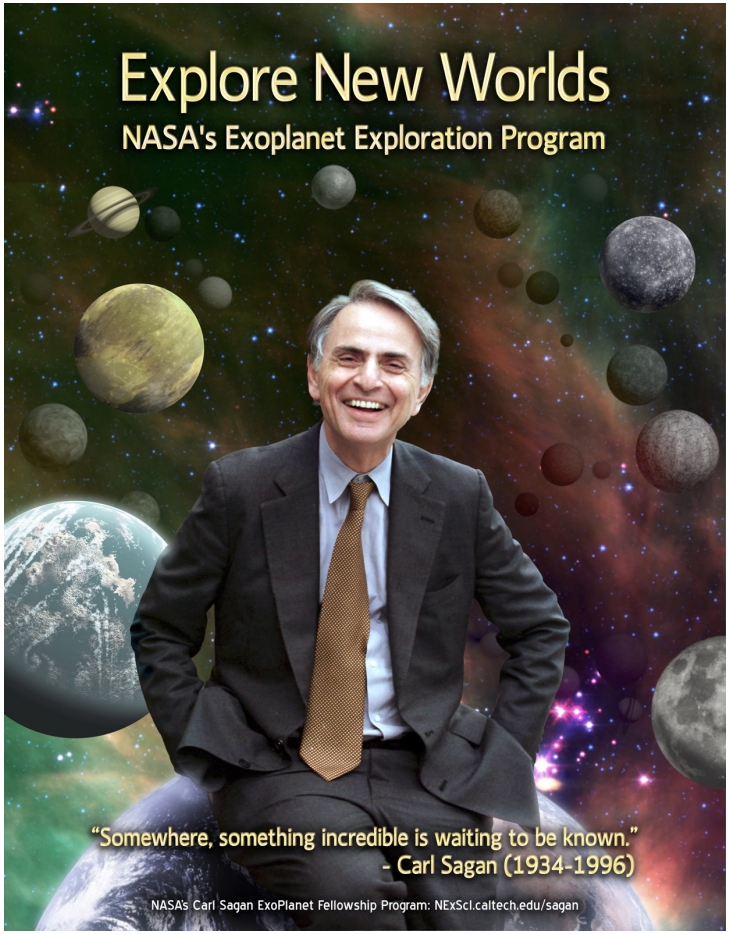
- The Sagan Program is part of NASA's Exoplanet Exploration Program (ExEP), one of three science themed programs at NASA (including Cosmic Origins & Physics of the Cosmos)
- The primary goal of missions within ExEP is to discover and characterize planetary systems and Earth-like planets around nearby stars
- The SSW continues the tradition of the past 19 Michelson/Sagan Summer Workshops
- This year we have over 500 registrants from institutions in 38 countries! Wow!



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The Organizing Committees

- **SOC:**
  - Heather Cegla, co-Chair (Univ. of Geneva/Univ. of Warwick)
  - Chad Bender, co-Chair (University of Arizona)
  - Chas Beichman (Caltech/IPAC-NExScI)
  - Eric Ford (Pennsylvania State University)
  - BJ Fulton (Caltech/IPAC-NExScI)
  - Elise Furlan (Caltech/IPAC-NExScI)
  - Dawn Gelino (Caltech/IPAC-NExScI)
  - Andrew Howard (California Institute of Technology)
  - Stephanie Leifer (JPL)
  - Andreas Quirrenbach (University of Heidelberg)
  - Johanna Teske (Carnegie Observatories)

- **NExScI LOC:**
  - Ellen O'Leary (Chair)
  - Wendy Burt
  - Megan Crane
  - Elise Furlan
  - Dawn Gelino

THANK YOU!

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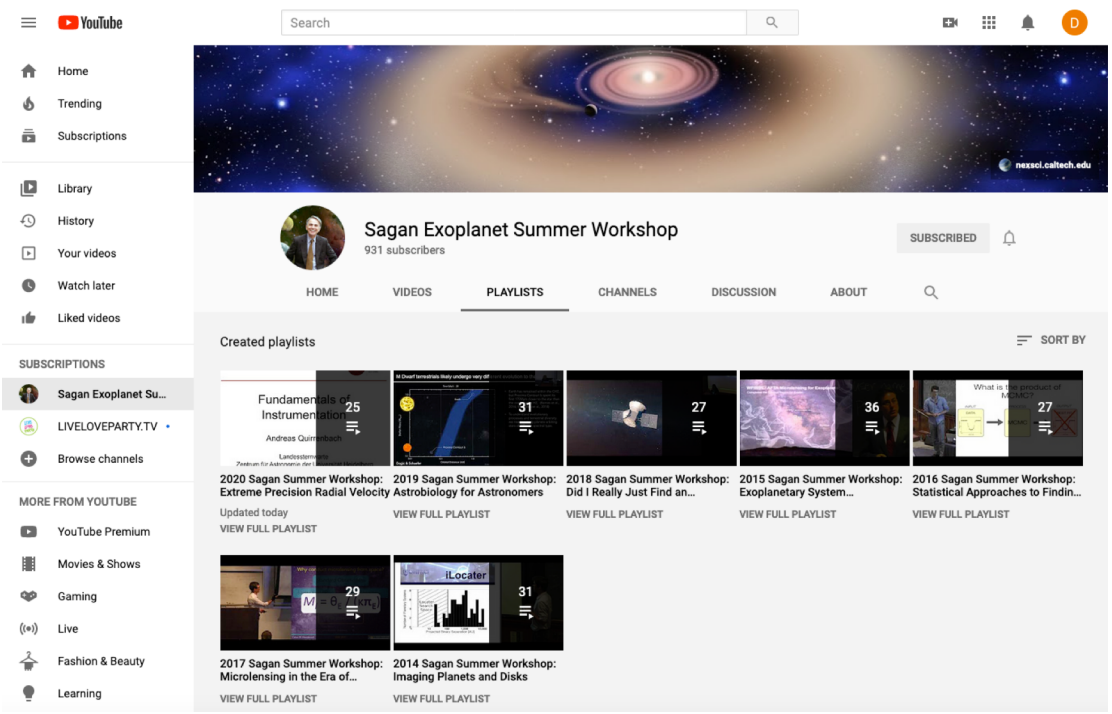
Presentations - Thank You Speakers!

- Videos of the pre-recorded talks are on the Sagan Exoplanet Summer Workshop YouTube channel.
  - Live presentations will also be posted on the SSW website and the YouTube channel
- All live talks are 25 minutes + 5 minutes for questions



- Panel discussions:
  - Panel members will give a brief summary of their talks and then answer questions from the live audience

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SSW Code of Conduct

- All SSW participants are expected to follow the Code of Conduct during the meeting including Q&A, Chat, and Slack conversations
- You will be removed from the meeting and Slack workspace if you violate this code

The organizers are committed to making this meeting productive and enjoyable for everyone, regardless of gender, sexual orientation, disability, physical appearance, body size, race, nationality or religion. We will not tolerate harassment of participants in any form.

Please follow these guidelines:

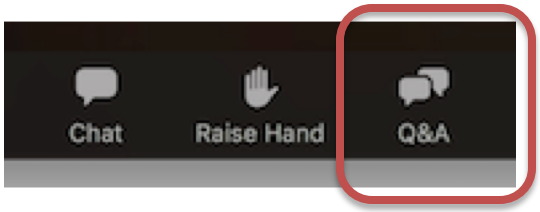
- **Behave professionally.** Harassment and sexist, racist, or exclusionary comments or jokes are not appropriate. Harassment includes sustained disruption of talks or other events, inappropriate physical contact, sexual attention or innuendo, deliberate intimidation, stalking, and photography or recording of an individual without consent. It also includes offensive comments related to gender, sexual orientation, disability, physical appearance, body size, race or religion.
- All communication should be appropriate for a professional audience including people of many different backgrounds. Sexual language and imagery is not appropriate.
- Be kind to others. Do not insult or put down other attendees. Critique ideas, not people.
- If participants wish to share photos or contents of talks/slides of any speaker or attendee on social media, we ask that they first get permission.

Participants asked to stop any inappropriate behavior are expected to comply immediately. Attendees violating these rules will be asked to leave the event at the sole discretion of the organizers.

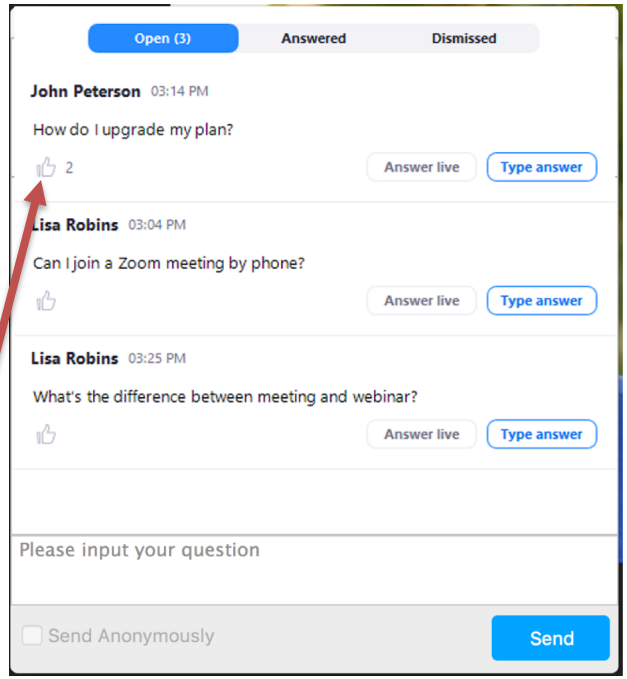
This code of conduct is based on the "London Code of Conduct", as originally designed for the conference "Accurate Astrophysics. Correct Cosmology", held in London in July 2015.

Attendee Status & Questions

- Unless you are speaking or chairing a session, you will be a Zoom Webinar Attendee
  - This means that your video and microphone are disabled, and the speakers can not see or hear you.



- All questions should be posted using the Zoom Q&A feature at the bottom of your screen.
  - We encourage everyone to ask questions
    - You can ask questions anonymously
    - Please upvote a question that you would also like to hear an answer for



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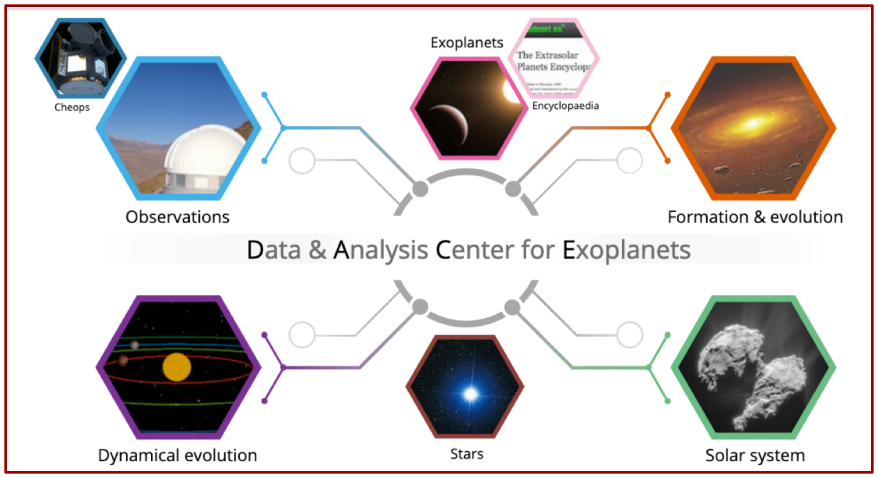
Interactive Workshop Features

- **Twitter: #sagan2020**
- "Lunch" with the Speakers (Friday, July 24)
  - Informal chat with a speaker and up to 15 attendees
  - Each speaker will be in their own Zoom meeting with the attendees who have signed up
    - Still have a few spots open, so sign up via Signup Genius link on the website (and in your email)
    - Note that there are 5 parallel meetings in each time slot
- Posters
  - See submitted posters on SSW website and have discussions with the authors in the #posters Slack channel
- Slack channel
  - Invite in the emails we have sent over the past month
  - We have set up several channels:
    - #hello_my_name_is
    - #posters
    - #hands-on-session

Hands-On Sessions – Thank You

- The preparation and computer support in getting ready for the hands-on sessions would not have been possible with the dedicated help from:
  - BJ Fulton (NExScI)
  - Nathan Hara (U of Geneva)
  - Chad Bender (U of Arizona)
  - Heather Cegla (U of Warwick/U of Geneva)
  - Elise Furlan (NExScI)
  - DACE Team (led by Damien Segransan – U of Geneva)



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Hands-On Sessions: From Pixels to Planets: Finding Planets in Radial Velocity Data

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- **Monday:** Learn how to use the online DACE analysis platform to identify planets in RV time series data and model them using MCMC techniques to extract precision planetary parameters and uncertainties.
- **Tuesday:** Learn how to extract radial velocities from high-resolution spectra and dive into the details of planet hunting using the radial velocity technique.
- **Wednesday and Thursday:** Participants will work on the Planet hunt challenge. Since the challenge is expected to take a few hours, participants will continue working on their own on Thursday with support from experts being provided virtually over Slack.
- **Friday:** Participants will report back with the planets they have found, and we will compare and contrast the results and discuss the challenges associated with radial velocity detection of planets.

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Hands-On Sessions

- Everyone, from beginner to expert, is welcome to participate!
- For the hands-on sessions, participants will access various tutorials from the Data & Analysis Center for Exoplanets (DACE) platform to learn about how to find planets using the radial velocity technique.
- The activities will use online tutorials and Jupyter notebooks
- Python proficiency is not required, but some basic knowledge would be beneficial, such as basic syntax and how to use Jupyter notebooks.
- If you cannot successfully install Python, you can use the online DACE tools instead of the Jupyter notebooks.
- Look on the SSW website for more information, tutorials, and software instructions

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Let's Get Started!

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Send in your headshot by July 31 to be part of the 2020 Workshop picture!

Enjoy the Workshop!

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