



Meet The GA Speakers!

This email will feature our select group of speakers. The GA organizers have worked hard to put together a fascinating and inspiring program for you. Enjoy the events!



KEYNOTE SPEAKER: Emily Calandrelli

Emily Calandrelli is the host and co-executive producer of the hit Netflix series Emily's Wonder Lab. Each episode features Emily and a group of kid-scientists as they learn about STEAM through experiments and fun activities. Emily is also an Executive Producer and Emmy nominated host of FOX's Xploration Outer Space and was a correspondent on Netflix's, Bill Nye Saves The World.

Emily frequently gives talks about the importance of science literacy, the benefits of space exploration, and the challenges for women in STEM careers for clients like Google, Pixar, MIT, Texas Instruments as well as dozens of K-12 schools across the nation. Her first two TEDx talks, "I Don't Do Math" and "Space Exploration Is The Worst," have garnered over one million views on YouTube.

Prior to her work in science communication, Emily attended West Virginia University, where she received a Bachelors of Science degrees in Mechanical Engineering and Aerospace Engineering, and MIT where she received two Masters of Science degrees, one in Aeronautics and Astronautics and the other in Technology and Policy. Through her work, she wants to make science relatable, easy to understand and more exciting today than ever before in history.

Presentation Topic: Women in STEM

[Learn more about Emily Calandrelli](#)



YOUTH DAY SPEAKER: Dr. Aaron Persad

Dr. Aaron H. Persad is a Research Scientist in the Department of Mechanical Engineering at the Massachusetts Institute of Technology (MIT). His primary research investigates the size-separation of molecules using novel filters made of graphene with Angstrom-sized features. He also currently serves as the Director of Bioastronautics for the International Institute of Astronautical Sciences. Dr. Persad has extensive experience in human-in-the-loop (HITL) testing. In 2019 he co-founded a new spacesuit research lab at the Canadian Space Agency headquarters for Extravehicular Activity (EVA) analog gravity-offset studies. In 2015, he managed the first microgravity tests of a commercial Intravehicular activity (IVA) spacesuit with the National Research Council of Canada and PoSSUM; since then, he has managed four other international reduced gravity flight campaigns to advance the Technology Readiness Level of IVA spacesuits. Dr. Persad's other research activities include advancements in space sciences and technology.

Presentation Topic: The Era of Commercial Human-Tended Spaceflight Research

[Learn more about Dr. Aaron Persad](#)



GA SPEAKER: Dr. Katie Mack

Dr. Katherine (Katie) Mack is a theoretical astrophysicist who studies a range of questions in cosmology, the study of the universe from beginning to end. She currently holds the position of Assistant Professor of Physics at North Carolina State University, where she is also a member of the Leadership in Public Science Cluster. Throughout her career, she has studied dark matter, the early universe, galaxy formation, black holes, cosmic strings, and the ultimate fate of the cosmos.

Alongside her academic research, she is an active science communicator and has been published in a number of popular publications such as Scientific American, Slate, Sky & Telescope, Time.com, and Cosmos Magazine, where she is a columnist. You can find her on Twitter as @AstroKatie.

Presentation Topic: Death of a Universe



GA SPEAKER: Dr. Hilding Neilson

CLTA Assistant Professor, Dept of Astronomy & Astrophysics, University of Toronto
Hilding Neilson is a CLTA assistant professor in the David A. Dunlap Department of Astronomy & Astrophysics at the University of Toronto. His research focuses on understanding stellar atmospheres, stellar characterizations and understanding exoplanet host stars while also working to integrate Indigenous knowledges and methods into how we view and understand the universe.

Presentation Topic: Colonization/Astronomy and Space Exploration



GA SPEAKER: Kate Russo

With a professional background in Psychology, Kate is a recognized authority on the total solar eclipse experience. Not only is she able to talk from her personal experiences of eclipse chasing for over 20 years, she can also share the experience of the hundreds of others she has surveyed and interviewed. She has authored three books on the topic and is in demand as a speaker and in the media due to her passionate and relatable manner. Her aim is to encourage everyone to experience a total solar eclipse, and to experience the awe and wonder of being in the Moon's shadow.

Presentation Topic: Putting Words to the Ineffable

Mars Madness Panellist: Randall Rosenfeld, RASC Archivist

R.A. Rosenfeld, FRASC, is the Archivist of the RASC, and Director of the Society's Dornier Telescope Museum. Among his publications are studies of the earliest images of sun spots, the experimental archaeology of observing, and the history of colonialism and astronomy in Canada and the recovery of forgotten astronomers. In the guise of 283990 Randall Rosenfeld is currently in orbit between Mars and Jupiter.

Presentation Topic: RASC History of Mars Observations

Mars Madness Panellist: Roland Dechesne, Chair of the RASC's Inclusivity and Diversity Committee

Roland Dechesne FRASC is a Past President of the Calgary Centre of the Royal Astronomical Society of Canada and an amateur astronomer with over 40 years of experience. He has been a popularizer of astronomy to the public for much of that time. His interests are astrophotography, meteorites and light pollution abatement. He 'moonlights' as an oil and gas geologist during the day.

Presentation Topic: A 25-year retrospective of the Allan Hills meteorite analysis

Mars Madness Panellist: Debarati Das

Debarati Das is a graduate student at McGill University and a NASA's Mars Science Laboratory team member. Her current research deals with the analysis of data from the Laser Induced Breakdown Spectroscopy (LIBS) instrument on the ChemCam suite of the Curiosity rover. Debarati also studies terrestrial analogs to explain the geochemistry of Gale crater and received a National Geographic Early Career Grant to fund her fieldwork in Death Valley.

Presentation Topic: Finding life on Mars through Earth analogues

Mars Madness Panellist: Richard Leveille

Richard Leveille's current research is focused on Mars geochemistry and mineralogy and preparing for future astrobiology missions to Mars (and Europa) by performing investigations in analog environments here on Earth. In particular, he is interested in weathering of mafic rocks and alteration minerals on Mars as indicators of past environmental conditions and habitability, and he is currently a NASA Mars Science Laboratory Participating Scientist and a part of the science team working with the Curiosity rover that has been on Mars since August 2012.

Presentation Topic: Earth analogues and the role of rovers in learning about the Red Planet.

OBSERVATORY TOUR SPEAKERS

- Chris Herd - Meteorite Lab at the University of Alberta
- Patrick Hill - Meteorite Lab at the University of Alberta
- Sean Dougherty - Director of ALMA - Cochrane AB
- Mike Couvrette - Roberta Bondar Ft Smith NWT
- Helen Panter - Wood Buffalo National Dark Sky Preserve

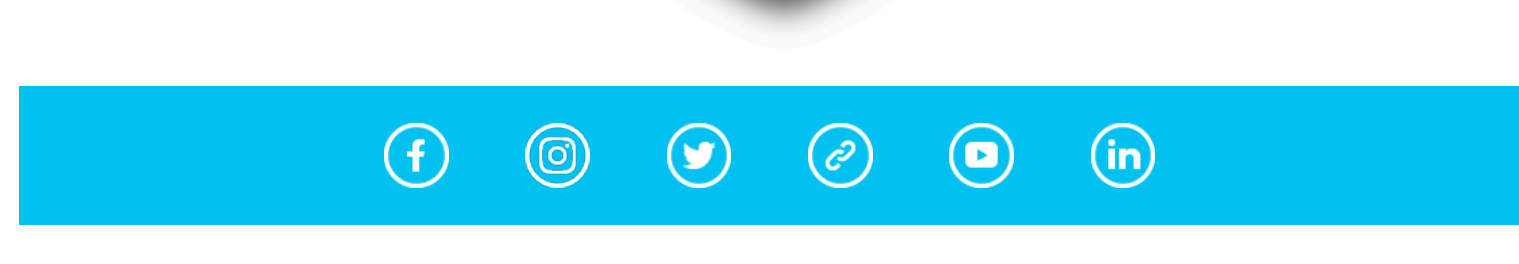
If you haven't purchased your tickets yet, tick tick... tick tock! You're running out of time.

[Purchased your tickets now!](#)

We're happy to help.

Contact communications@rasc.ca for answers to your questions regarding 2021 GA speakers.

We can't wait to see you!



[view this email in your browser](#)

Copyright © 2021 The Royal Astronomical Society of Canada, All rights reserved.

Want to change how you receive these emails? You can update your preferences or unsubscribe from this list.