Recordings: http://connectpro35337274.adobeconnect.com/pyj2b0cc0smo

Erin Hogeboom: Hello and thank you for joining us today for the Girls STEAM Ahead with NASA webinar! Please take a moment to introduce yourself here in the chat, along with any affiliated organizations, and answer our check-in question: How are you anticipating you will use the resources you learn about today?

Adrienne Provenzano: Hello! I'm an independent STEAM educator and a volunteer with NASA's Solar System Ambassador program.

Kathy Thomas: Hello everyone! Kathy here from The Connectory. (www.theconnectory.org)

Kasey GO: Hello everyone! My name is Kasey Gaylord-Opalewski and I am the STEMExplore Coordinator for EarthEcho International. Coming to you from sunny Sarasota, FL

Bernice Prigge Rodriguez: Greetings from MN! I am the Service Unit Manager for the Minneapolis Lakes Service Unit, part of Girl Scouts of MN and WI River Valleys. I anticipate using these resources to empower leaders to do the NASA /SETI badges and to create programming for the girls.

Kasey GO: earthecho.org and stemexplore.org

Carolyn Slivinski: Hi, all - Carolyn Slivinski here from STScI. I'm here with Emma Marcucci and we're looking forward to talking to you all!

Amy Thornton: Hi from Cape Fear Museum in Wilmington, NC. We're excited to learn more about these resources and share them with our community.

Adrienne Provenzano: Am planning on a Girl Scout presentation in future and curious how these ideas might be applied. Also working on other outreach programs for youth.

Mary Dussault: Hello Everyone,

Kasey GO: I hope to use these resources to empower underserved girls with programming I am creating and plan to launch in the Fall with partner sites all over the country!

Sarah R Adamson: Hi, I'm Sarah from LA. I'm a Brownie GS Leader keen to share more about STEAM and particularly NASA with our girls.

Shawnda: Hi, I'm Shawnda from Houston. I'm a Brownie co-leader and coach a Junior FIRST Lego League team of Daisies and Brownies.

Erin Hogeboom: Should you have any questions while this webinar occurs, please feel free to type them here and we will field them to our presenters.
Adrienne Provenzano: Great webinars through Universe of Learning, have participated in a number of these. Very accessible and comprehensive.
Erin Hogeboom: Thank you for that kind note, Adrienne!
Erin Hogeboom: SME = Subject Matter Experts
Erin Hogeboom: If you are interested in hard-copy versions, please email: girlsSTEAMahead@universe-of-learning.org.
Erin Hogeboom: Link for Girls STEAM Ahead STEM Activities: https://www.universe-of-learning.org/gsawn/#girls-steam-available-resources
Erin Hogeboom: Exoplanets resource: https://exoplanets.nasa.gov/
Kasey GO: Love the looks of this!
Adrienne Provenzano: That's neat!
Bernice Prigge Rodriguez: This is so cool! We're planning a star camp in October and this will be awesome for the girls to delve into!
Erin Hogeboom: We are so pleased that you are all enjoying these resources!
Jessica Harris (NRAO): Can you provide the link again for the exoplanet cards, please?
Adrienne Provenzano: Connections with Morse code? Does anyone use that anymore?
Erin Hogeboom: Exoplanets resource: https://exoplanets.nasa.gov/
Erin Hogeboom: Please continue to type any other questions, here.
Lindi Mujugira: Hi my apologies for the late introduction - I'm Lindi Mujugira from Bellevue College, hoping to gain some insight into projects for Girls (although all our STEM girls are college students, some are still in high school doing Running start). Thanks for these resources
Jessica Harris (NRAO): In the southern hemisphere, where?
Kasey GO: WOW how cool!!
Adrienne Provenzano: Great "real world" relevance!
Erin Hogeboom: Jessica, is your question where the telescopes are in the southern hemisphere?
Jessica Harris (NRAO): Yes, Mary mentioned they hope to have some in the southern hemisphere.
Erin Hogeboom: I see--I will ask this of Mary when she's done!
Jessica Harris (NRAO): Okay, thanks Erin
Erin Hogeboom: The URLs for the resources Emma shared are:


Erin Hogeboom: Speaking with Spacecraft/Binary: http://chandra.si.edu/binary/

Erin Hogeboom: Any questions for Mary as you see her utilizing this software?

Adrienne Provenzano: Is this program available for anyone? Only K-12 that sign up?

Emma Marcucci: The program is available for anyone. It is a public site, you just enter your email to get your image.

Adrienne Provenzano: Wonderful!

Erin Hogeboom: Here’s a reminder of the link for this resource: Observing with NASA portal for the MicroObservatory: http://mo-www.cfa.harvard.edu/MicroObservatory/

Adrienne Provenzano: There was a great Universe of Learning webinar about visualization of data earlier this year, but I’m not sure of the link. Maybe Erin or Emma know?

Erin Hogeboom: MicroObservatory YouTube page: https://www.youtube.com/channel/UC9Bt6iRp15iFNkVK0hXqqEA


Emma Marcucci: That is part of our professional learning experiences hosted by the Museum Alliance

Adrienne Provenzano: Thank you for honoring Cecilia P-G that way!

Emma Marcucci: Many of the viz examples talked about on the briefing are option you can look at with MicroObservatory. The image processing in MicroObservatory

Emma Marcucci: is a narrower focus of the software that visualizers would use.

Adrienne Provenzano: Shows the perseverance and patience an astronomer needs!

Erin Hogeboom: Absolutely, Adrienne!

Carolyn Slivinski: Indeed, Adrienne!

Erin Hogeboom: We will be having a Q&A shortly, so please get your questions ready!

Adrienne Provenzano: The NASA eyes on software also has visualization processing. Does someone have that link to share?

Emma Marcucci: Eyes on Exoplanets https://eyes.jpl.nasa.gov/eyes-on-exoplanets.html

Emma Marcucci: There is also Eyes on Earth and the Solar System: https://eyes.jpl.nasa.gov
Bernice Prigge Rodriguez: Are there particular program guides with these tools, or is it all "self-guide"


Bernice Prigge Rodriguez: how do we find the in-person locations for the SMEs?

Jessica Harris (NRAO): Thank you for answering my question.

Adrienne Provenzano: Are there any educational materials about the early women astronomers at the Harvard Observatory? I am aware of the book Glass Universe, but that is intended for adult readers.

Bernice Prigge Rodriguez: Excellent! Thank you!

Emma Marcucci: girlsSTEAMahead <girlsSTEAMahead@universe-of-learning.org>

Erin Hogeboom: Thanks, Emma!

Mary Dussault: microobservatory@cfa.harvard.edu

Mary Dussault: Harvard plate stacks:

Adrienne Provenzano: There was a short segment in the reboot of Cosmos, but more would be great! Thank you!!!

Kasey GO: Thank you, this was great!

Bernice Prigge Rodriguez: THANK YOU!

Jessica Harris (NRAO): Thank you!

Adrienne Provenzano: Thanks to all of you for a great webinar.

Lindi Mujugira: Thank you for all the information

Mary Dussault: https://platestacks.cfa.harvard.edu


Adrienne Provenzano: Thank you, Mary.

Sarah R Adamson: Thank you All!