NSSEC Rice U Status Report – June 2020

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· Communication: work on determining next iClip underway

HMNS is creating a new planetarium show on exoplanets and the possibility for life on other planets. This is presently on hold because of COVID. We are concentrating on remote learning, and especially in using diverse role models.

• Education: Stellarium and other online training for planetarians and teachers

Dr. Reiff is hosting free online Zoom training for Stellarium, Space Update, and Space Weather for teachers and also for planetarium educators. So far 86 planetarians and 18 teachers have signed up for one or more trainings. The website for information and archiving is here: http://space.rice.edu/nssec/training/. We only did two each planetarium and teacher training in June, because of our focus on Zoom planetarium shows and events.

• Communication: Free Zoom Planetarium shows (diversity focus)

Dr. Reiff is continuing the free online Zoom showings of planetarium shows on Wednesdays, and now star shows on Thursdays. Schedule here: http://space.rice.edu/nssec/shows.html. Signups are through Eventbrite so that we can keep metrics and ensure that the Zoom meetings are not oversubscribed. The "solstice at the sundial" featured not only remote viewers but inperson viewers, led by African-American astronomer James Wooten.



HMNS astronomer James Wooten explains the sundial (left) and the analemma (right).



At the time of the solstice and equinoxes, the sundial casts an image of the Sun. The image to the left was from a preview day on Thursday (but of course it was cloudy on the actual solstice on Saturday). The zoom program also discussed the astronomical "reasons for the seasons".

Left: visitors showing how the sundial casts an image of the sun at the summer solstice (and also at the equinoxes and winter solstice). (They gave oral permission to use the photo).

The Sky Shows on Thursday afternoons, in addition to teaching seasons, constellations, etc. also feature Mars overflights created by HMNS student interns. The interns were chosen from the Houston-area Science Fair winners. The first intern that presented was Maggie Asare on June 25 (African-American); other will present in July.



Above: screen shot of some of the participants in the June 25 event which showed the Mars overflight created by intern Maggie Asare, an HMNS summer intern (top right). Participants were told to stop their videos if they did not want their images used. Dr. Sumners (top left) is the mentor for the interns at HMNS.

Here is a chart of the shows and attendance in June:

| Date | Event Name | No. registered | Max simultaneous connections | Estimated children |
|---------|---|-------------------|------------------------------|--------------------|
| 6/3/20 | Magnetism | 111 | 49 | 4 |
| 6/4/20 | Night Sky TONIGHT | 47 | 24 | 2 |
| 6/10/20 | Apollo and Beyond | 66 | 39 | 8 |
| 6/11/20 | Night Sky TONIGHT | 30 | 19 | 6 |
| 6/17/20 | It's About Time | 95 | 29 | 10 |
| 6/18/20 | Night Sky TONIGHT | 42 | 18 | |
| 6/20/20 | Solstice at the Sundial* Note: also had 28 in person | 27 | 40 | 12 |
| 6/24/20 | Impact Earth | 60 | 44 | 3 |
| 6/25/20 | Night Sky TONIGHT - prepare for Mars | 34 | 18 | 3 |
| TOTAL | JUNE, 2020 | 512 | 280 | 18 |

Dual-Language Shows

For July, we are going to dual showings of our planetarium shows, both in English at 6 pm and in Spanish (with English subtitles) at 7pm. This format should be good both for English language learners and for Spanish language learners! The first one, scheduled for July 1, is "Search for Life in the Universe" / "Busca la vida en el universo".

Publications

A final writeup of the best Zoom streaming procedures, and one on portable planetarium seating during COVID-19, plus others of our educational literature, has been posted to our website: https://www.eplanetarium.com/publications/