Notes from a conversation with Aurora Lipper from the [Central Coast Astronomical Society](http://www.centralcoastastronomy.org/), not an endorsement of any particular platforms by the Night Sky Network.

Thanks for writing! Yes hosting an online star gazing event is a lot of fun, and there’s a lot to know to make it run smoothly. I put together information as many clubs are contacting us with specific questions about it, since we’ve been doing it for a couple of months now, and have had 700+ in attendance. Kent is our astronomer rock-star, and I’m the one who handles the technology and keeps him on-track with questions.

Here’s some notes:

We’ve been doing club meetings with guest speakers streaming in remotely for a couple years now since we’re a small town in the middle of nowhere (at least, not near any astronomers to be our guest speakers), and we started doing our star gazing events online for the past 2 months now, both as a one-way broadcast and interactive multi-way (see below).

We use a remote desktop control/share software (Teamviewer is only one option available – there are others that may work better) and people that have scopes already are outfitted with astrophotography gear can easily pipe their images to each other through Zoom and use Teamviewer to control each other’s scopes – it’s not hard at all once it’s set up.

If the group for the live stream through telescopes are small, like less than 3 or 4 people, then we use Teamviewer so others can remotely operate each other’s scopes. This usually isn’t the case, though, so for a small group (less than 100) that has a more open-forum feel like a virtual star party where each person is viewing through a telescope, we’ll use Zoom and people can share their laptop screen (or whatever’s running the scope) for others to see while they narrate.

For large groups like the Virtual Star Gazing with Kent Wallace last weekend or Club Meeting which are also online now, I will Skype or Zoom with the person individually and then use OBS software on my computer and YouTube Live Stream to broadcast to everyone, also using planetarium software (Stellarium). You can also use Zoom Webinar but it’s more expensive for large groups. If you want total control over what people see besides your streaming video, and not have people on YouTube (which also can be distracting) and just have the player right on a page, you can embed a FB Live player (so  you’ll use FB Live not YouTube to stream your video) on a webpage or use Webinar Ignition (which uses YouTube as a back end).

For stargazing, we’ve found that Stellarium is helpful for the first part of the evening with interactive Q&A and then “going out” to the scopes for the second half. Since I run everything from a desktop, I connect to astronomers that talk about the night skies through Skype on my computer ad while they talk, I use Stellarium to point out how to find what they are talking about. Then for the telescope part, I connect with the astronomer of choice that has their scope set up to transfer images via Zoom or Skype as a screenshare. It’s a pretty smooth setup once all the pieces are in place.

Let me know if you have any further questions!  
Aurora

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