Student questions: SESE Students colloquium

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"Correcting for Extinction by Cosmic Dust in Galaxies Using Brightness Ratios at 0.5 um and 3.6 um"

10/9/19

Did you take into account possible misclassifications of the hubble type of a galaxy, as often it is quite difficult to determine?

-> I showed the uncertainties of the hubble type that I adopted from the literautre in the Figure and a form of sizes of ellipses, but did not take into account any further that that.

What are the possible issues with taking this method that was worked on with Hubble/SDSS and applying it to a different dataset?

-> My method is specifically designed for large galaxy surveys with combined observations of Hubble and James Webb. So the wavelength range might be different for other dataset.

Which solar abundance mixture did you use for your stellar evolution model isochrones?

-> I used the model ranges the metallicity (mass ratio of elements other than H and He to total) value of 0.5% of solar (0.02) to 250% of solar.

How will the system have to change to incorporate data once JWST is operational?

-> My model is built for JWST data with rest-frame 3.6 um, with discontinous broadband filter set of JWST and continuous redshift of galaxies would increase the uncertainty of my model.

What made you want to study star extinction?

-> This project had a funding that I could get paid.

What was a challenge you faced as part of your research?

-> Honestly, I kept asking myself about the advantage and credibility of my model. After I saw the agreement with the observation of nearby galaxies, I have more confidence in my model.