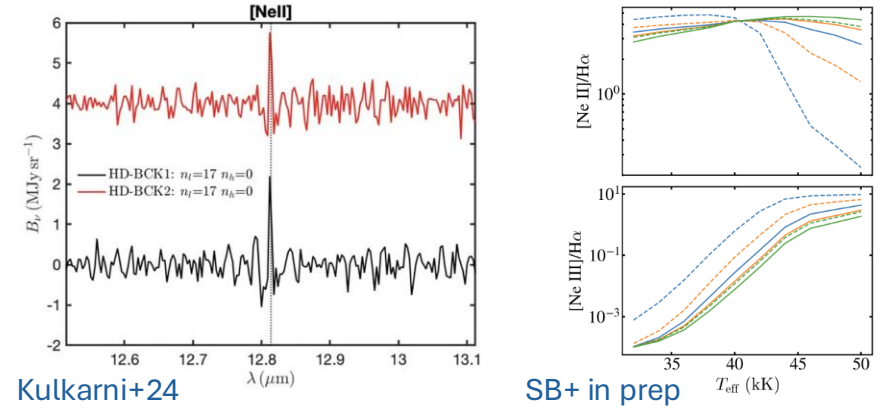


# Soumyadeep Bhattacharjee

Rising 3<sup>rd</sup> year graduate student at Caltech working with Prof. Shri Kulkarni (and others)

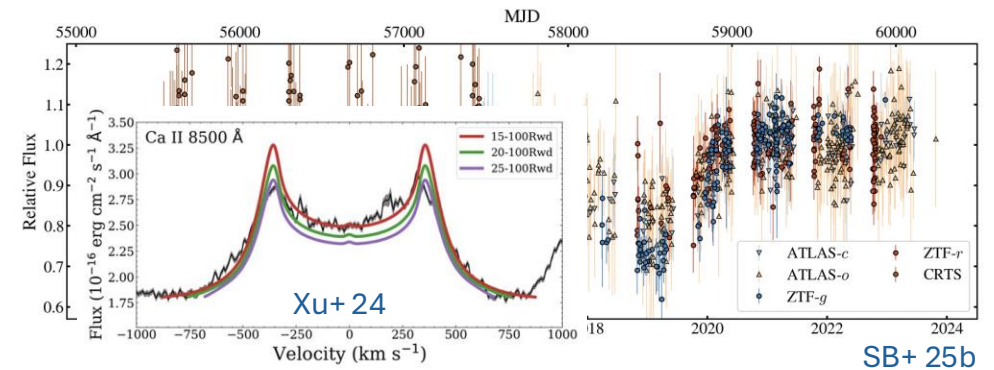
## Galactic Warm Ionized Medium

- Using JWST MRS to detect fine structure lines from elements like Neon
- What do they tell us? Elemental abundances? New WIM diagnostics?
- How do they compare with CLOUDY models?



## Dust, Debris and Gas Disks around White Dwarfs

- Find debris transits from photometric surveys
- Modeling observables (use CLOUDY?)



## Photometrically Variable Planetary Nebulae

- ZTF finds many variable PN central stars
- Model the PN emissions with CLOUDY?

