

# Are Exoplanets in the Habitable Zone of M Dwarfs Truly Habitable? Simultaneous Multi-Wavelength Observations of Nearby Flare Star CN Leo

Kepler Mission: low mass stars often host many planets  
The habitable zone of M Dwarf is very close to the host star  
Stellar activity effect on planetary atmospheric conditions

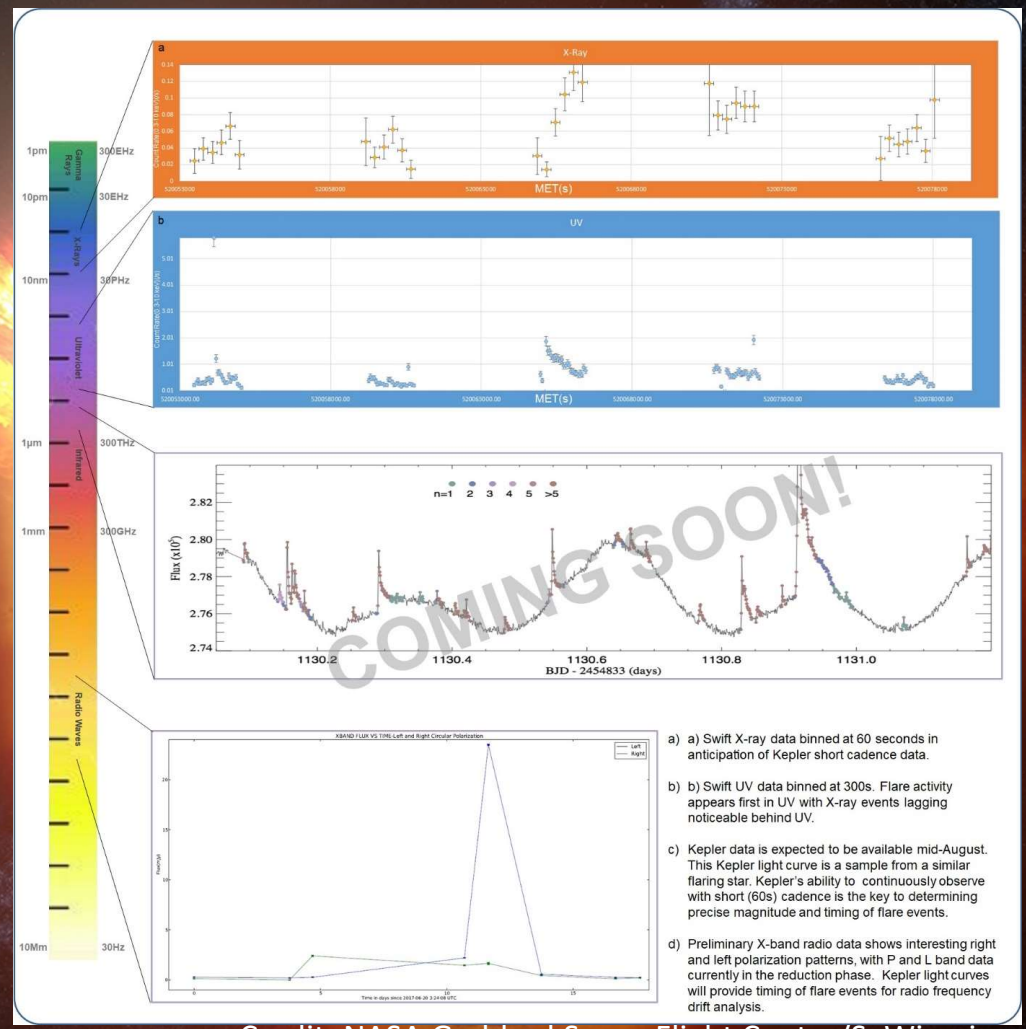
CN Leo, AKA Wolf 359  
One of four stars included in this study  
Proximity – 2.4 Parsecs  
Known to produce flares

Measure flare activity in all light bands

- Radio
- Optical
- UV
- X-Ray

SWIFT: simultaneous observations in UV and X-ray  
Create light curves to compare with Kepler

Beverly Thackeray  
Mentor: Dr. Elisa Quintana



Credit: NASA Goddard Space Flight Center/S. Wiessinger