System identification of TIC 313988572

Binary star system: (how do you know? Explanation needed)

* Running through data by professor🡪binary star system
* Programming for transit
* Analyze the curve
  + Characteristics of a binary system
* Analysis of the transit curve that echoes those characteristics
  + Information from the curve
    - Depth: ratio
    - Period: change in flux/flux = (radius of planet/radius of star) ^2
    - Wien’s law: luminosity =
    - Mass/radius
    - age
    - HR graph to determine more information

Classification of binary systems

<https://blog.planethunters.org/2010/12/25/eclipsing-binaries-vs-transits/>

calculation

<https://www.paulanthonywilson.com/exoplanets/exoplanet-detection-techniques/the-exoplanet-transit-method/>

Roche-limit-method

<https://dspace.mit.edu/bitstream/handle/1721.1/88678/Win_The%20roche%20limit.pdf?sequence=1&isAllowed=y>

Dips

TIC 1536984 (0)

2013258 (0, 1)

plt.xlim(1826,1827)

4207747 (2, 3, 5, 6, 7)

plt.xlim(2180,2181.5)

4735737 (0)

plt.xlim(1919,1920)