



CLASSIFYING VARIABLE STARS

TEAM "THE DOOMED KID"

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STARS

STARS

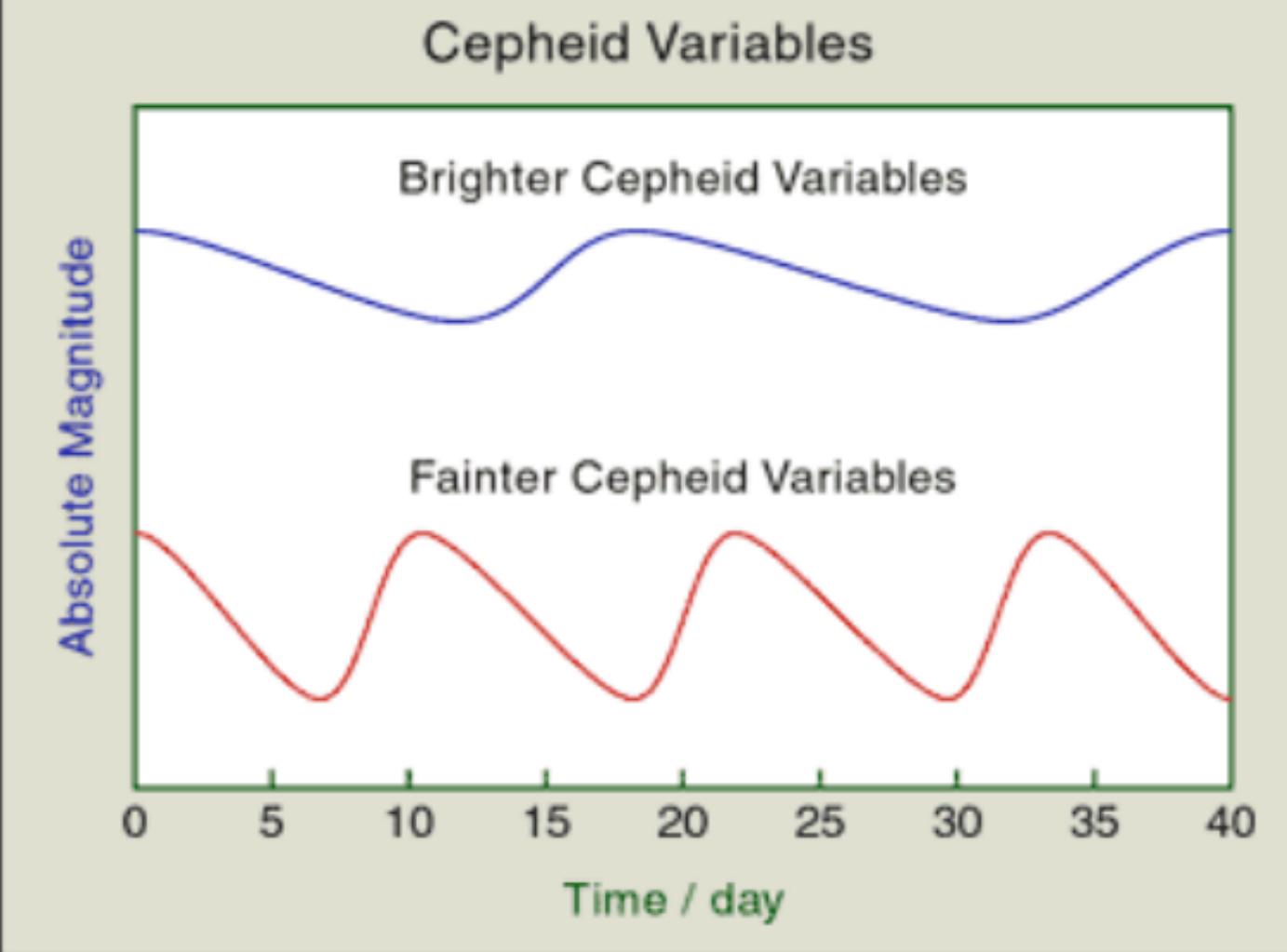
STARS

LIGHT CURVE

01

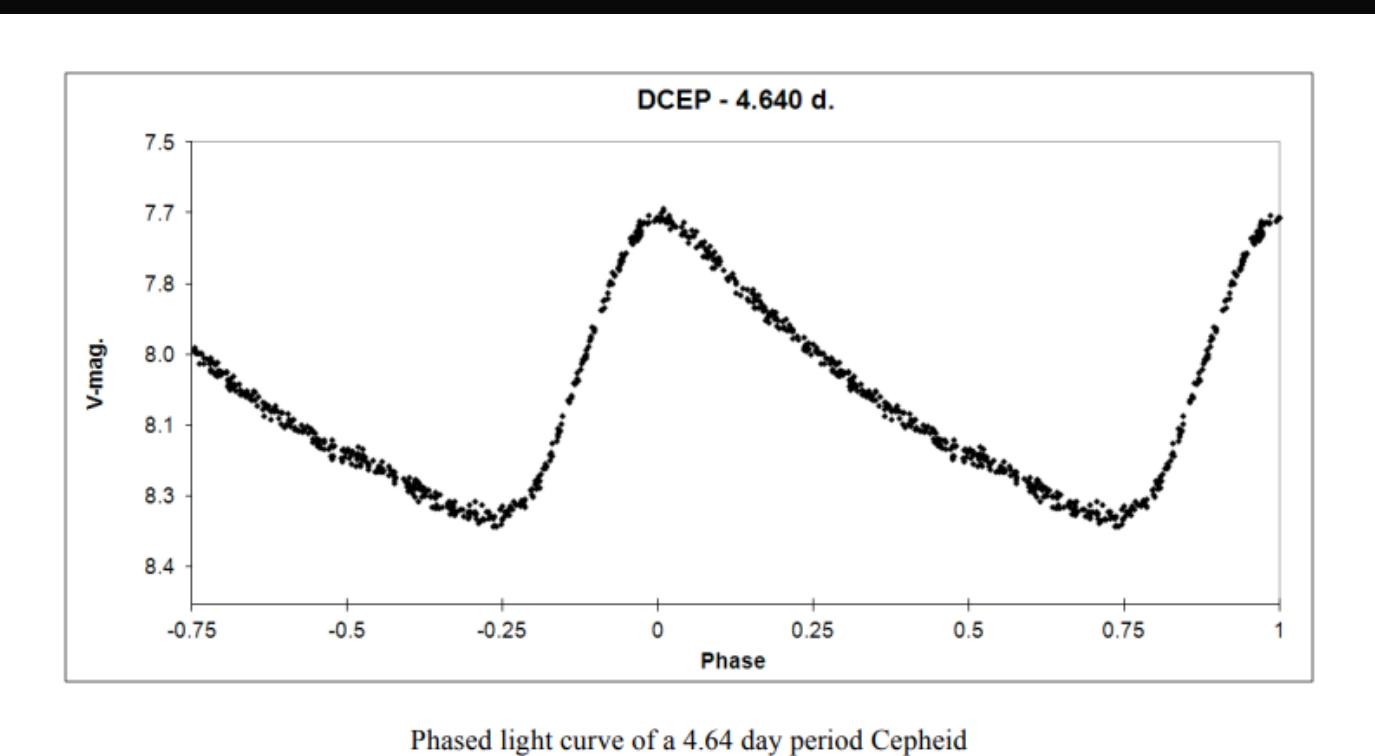
WHAT IS IT?

Variable star is the star whose brightness changes



02 HOW TIME SERIES HELPS?

- Brightness variations periodical, semiperiodical, irregular, or unique?
- time period of brightness fluctuations
- Shape of the light curve like symmetrical, angular, each cycle have one minima or more etc

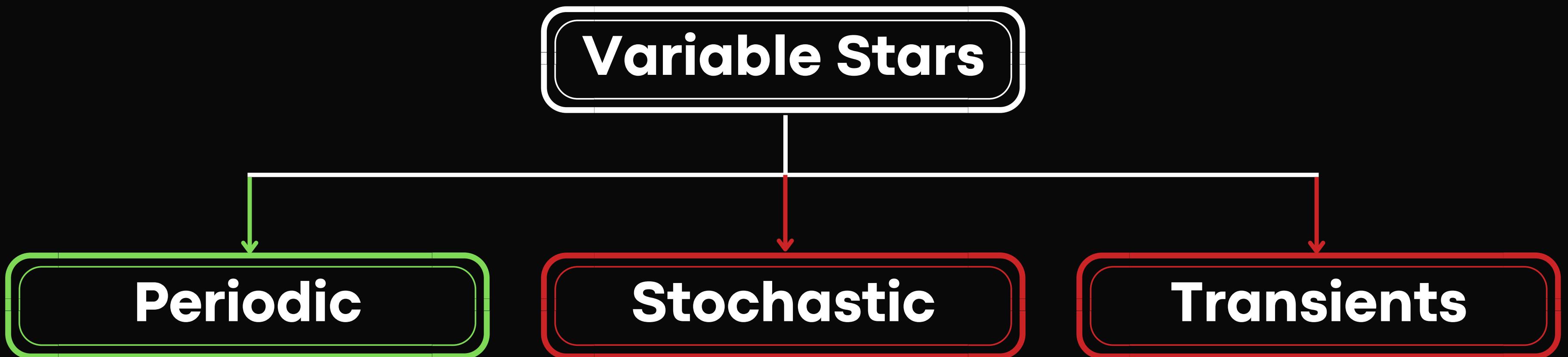


Reference Paper:
<https://arxiv.org/pdf/2002.00994.pdf>

Dataset:

[http://cdn.gea.esac.esa.int/Gaia/gdr3/
Photometry/epoch_photometry/](http://cdn.gea.esac.esa.int/Gaia/gdr3/Photometry/epoch_photometry/)

GAIA DR3



APPROACH

01

Different Representations



Different Models 02



THANK YOU