



CLASSIFYING VARIABLE STARS

STARS

STARS

STARS

TEAM "THE DOOMED KID"

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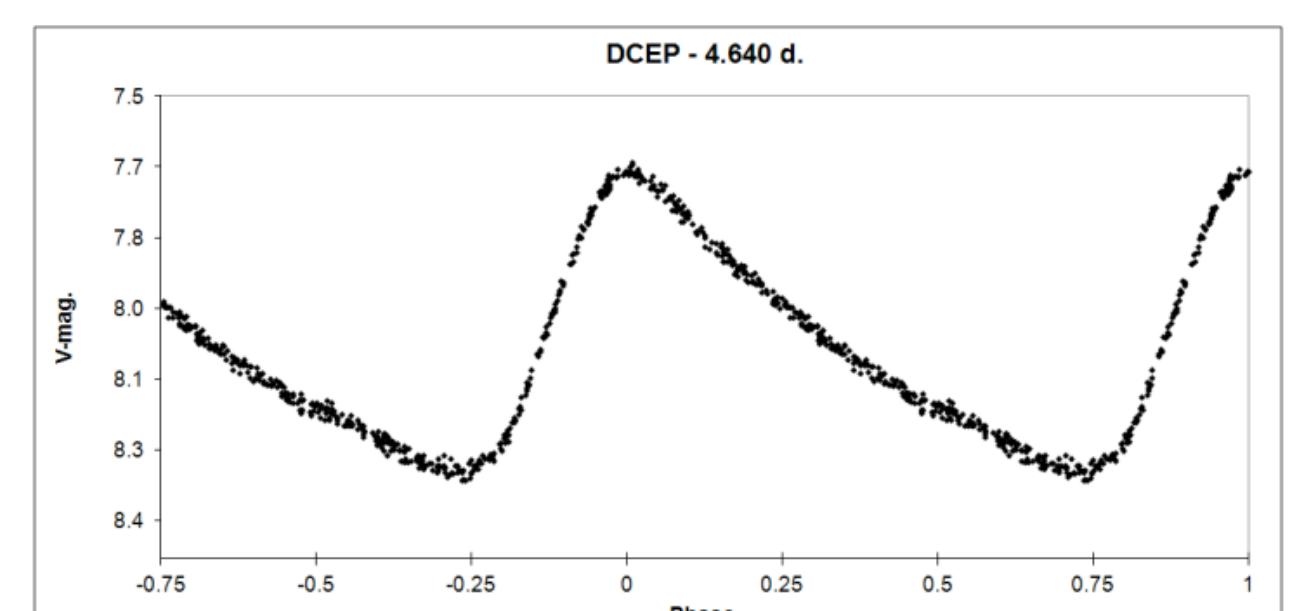
MD tanzil

LIGHT CURVE

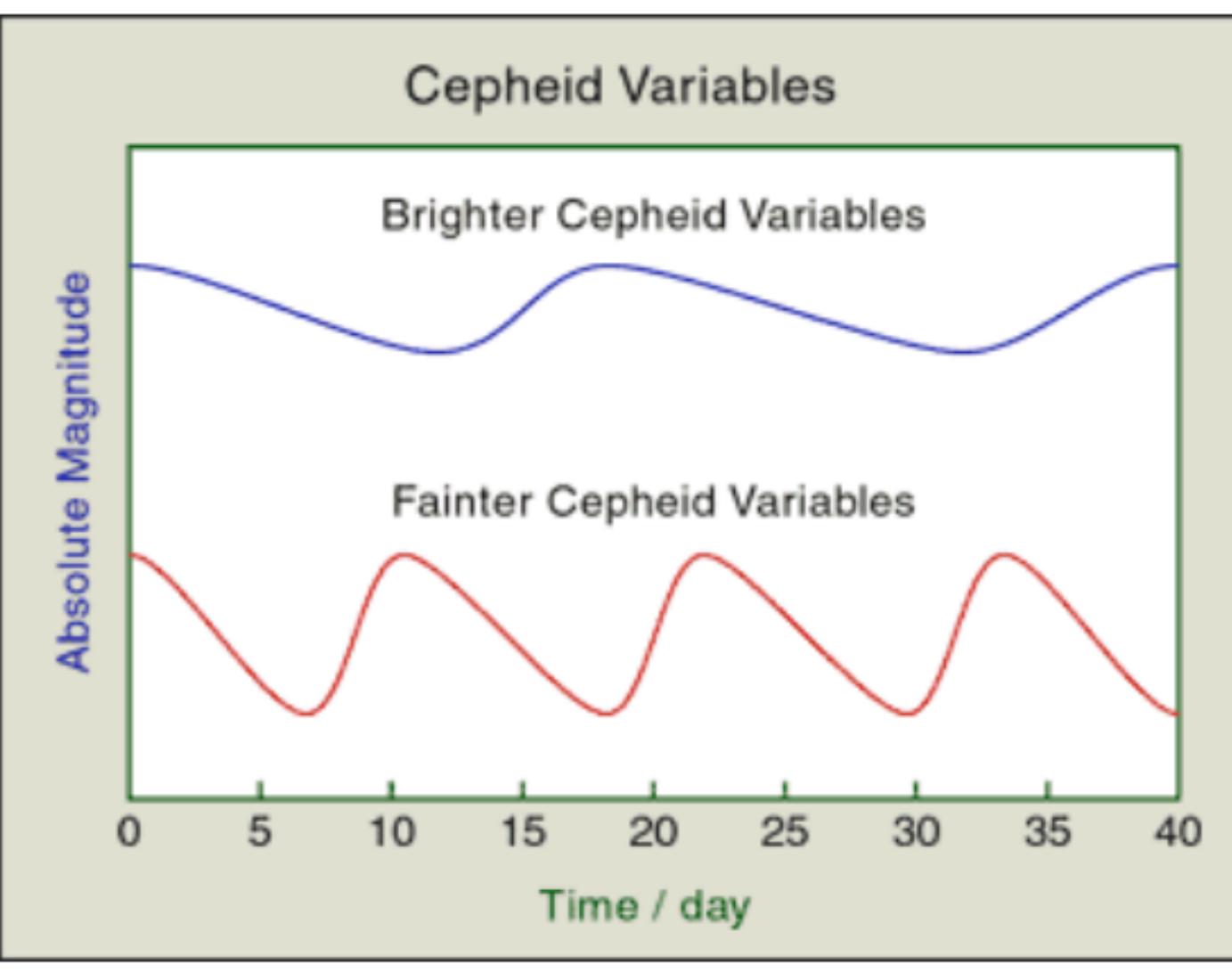
01

WHAT IS IT?

Variable star is the star whose brightness changes



Phased light curve of a 4.64 day period Cepheid



02 HOW TIME SERIES HELPS?

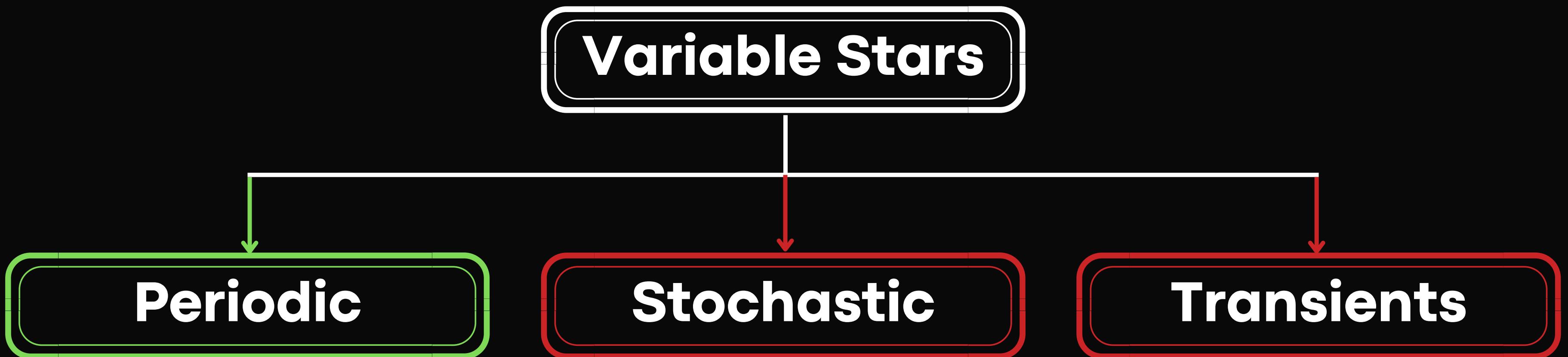
- Brightness variations periodical, semiperiodical, irregular, or unique?
- time period of brightness fluctuations
- Shape of the light curve like symmetrical, angular, each cycle have one minima or more etc

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/)

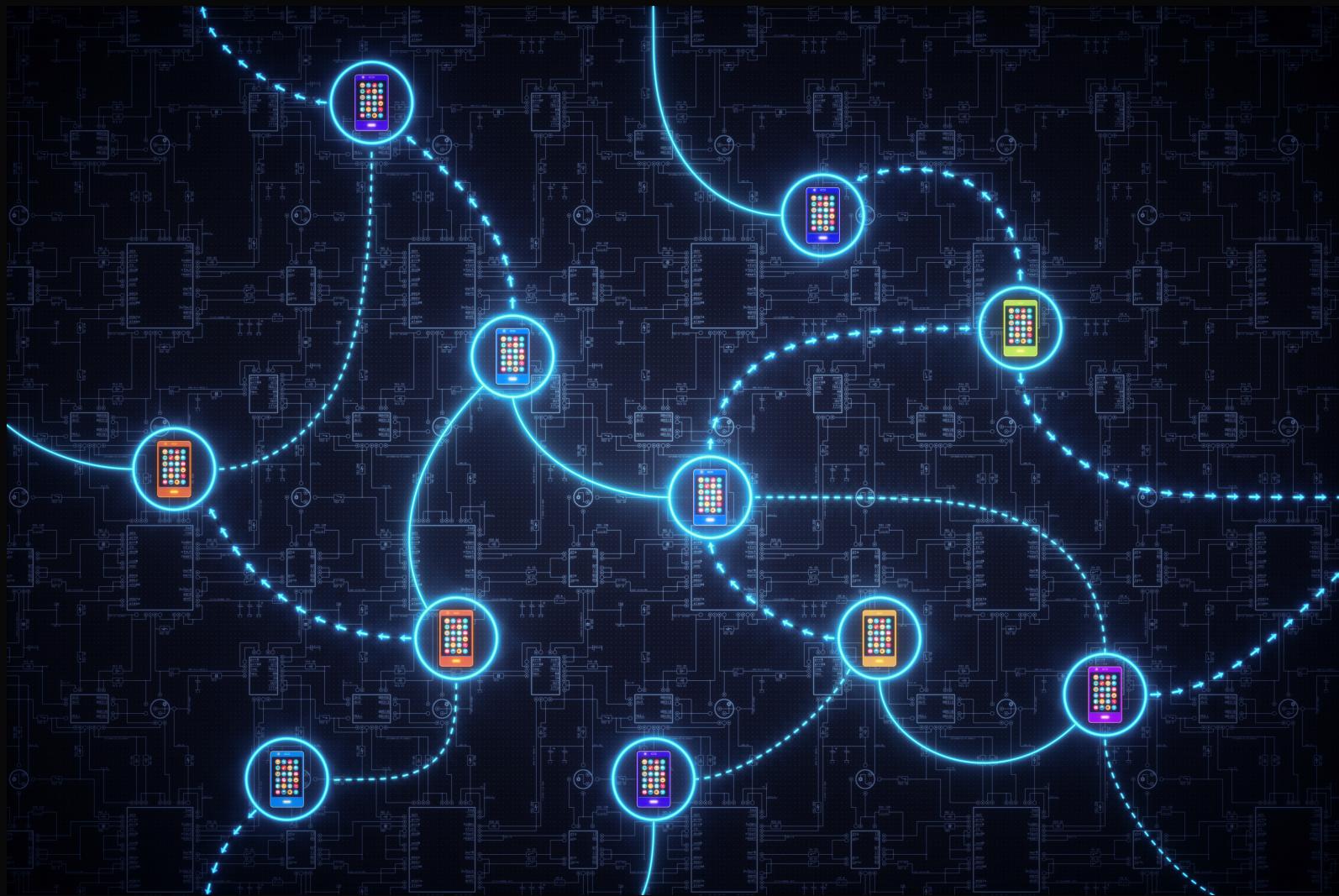
GAIA DR3



APPROACH

01

Different
Representations



Different 02
Models



THANK YOU