



Trumpler 5 - Cluster Properties and Exotic Populations

Komal Chand¹, Anju Panthi¹, Kaushar Vaidya¹, Khushboo K. Rao²

For details please check out our poster (P02)

Trumpler 5 –

- Age – 3 Gyr
- Distance ~3050 pc
- Largest populations of Blue straggler stars

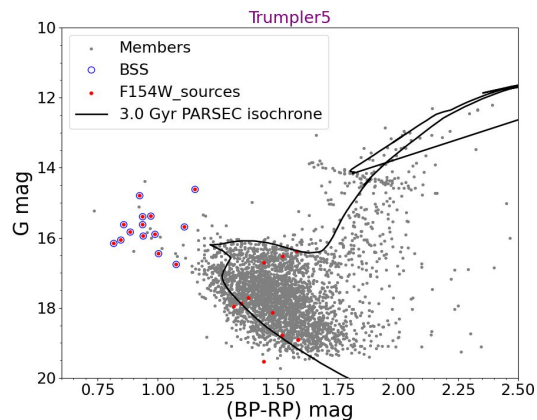
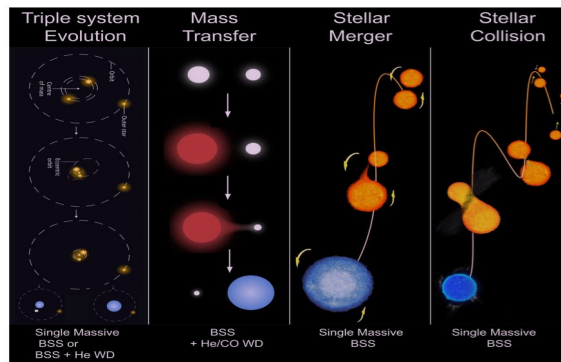
Blue straggler stars –

- Do not seem to follow standard theory of single-evolution star
- Brighter and bluer than the MSTO
- Lucky late bloomers which gained mass

Data used –

- Ultraviolet data – *Astrosat*/UVIT, *GALEX*
- Optical data – *Gaia*, PanSTARRS
- Infrared data – 2MASS, *WISE*

Formation Channels –



What do we want to know?

- Fundamental properties and structural parameters
- Dynamical evolution of the cluster
- Search for hot companions
- Investigate formation mechanisms

Conclusion –

- cluster radius = 20', core radius = 4.19', tidal radius = 45.21'
- Binary stars – 13
- Single star – 1
- All binary stars have a low- or extremely-low mass white dwarf as a companion