

# Astrophysics of gravitational wave sources

Lecture 3: Stellar structure

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# Stellar structure

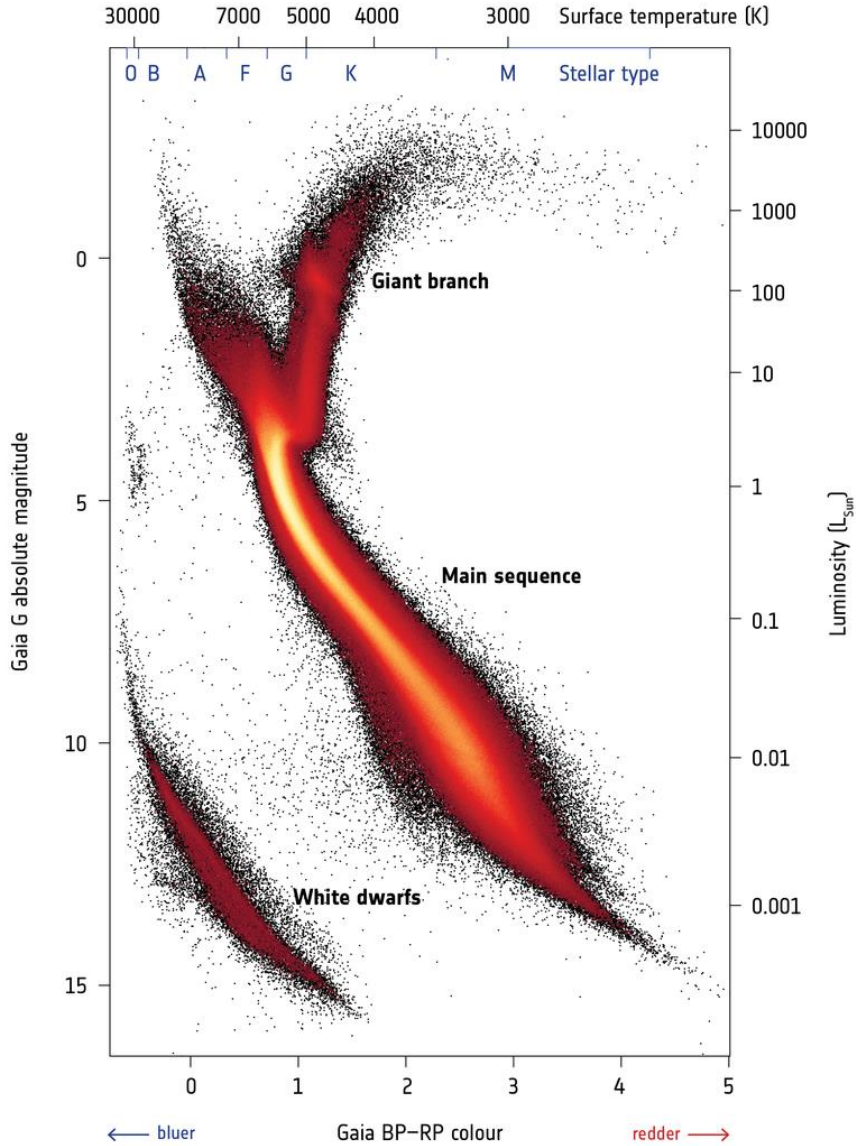
# Virial theorem

# Separation of stellar timescales

- Dynamical (free-fall, sound-crossing) timescale
- (Viscous timescale)
- Thermal (Kelvin-Helmholtz) timescale
- Nuclear timescale

# Main parameters of stars

## → GAIA'S HERTZSPRUNG-RUSSELL DIAGRAM



# Homology relations

# Stellar evolution

