

## The TRGB-SBF Project: a Pop II path to $H_0$

*Friday 7 February 2025 08:30 (30 minutes)*

The path from Cepheid variables to type Ia supernovae gives a value of the Hubble constant which significantly disagrees with the value determined from observations of conditions in the early universe and a cosmological model. A totally independent measurement of  $H_0$  from observed redshifts and distances is needed to evaluate the possibilities of systematic errors. A path is being explored that should be as accurate or better than the Cepheid-SNIa way, involving only observations of old evolve stars. Gaia parallaxes ground the absolute vales of RR Lyrae stars that establish the absolute magnitudes of stars at the tip of the red giant branch that set the scale of the power spectrum of surface brightness fluctuations in E/S0 galaxies that are observed at redshifts with negligible confusion from peculiar velocities. Observations with JWST are fundamental for the success of this program.

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**Session Classification:** Session 12