

Variable stars of the Instability Strip like Classical Cepheids and RR Lyrae are precise distance diagnostics, because they follow tight period-luminosity relations (PLs). Moreover, their evolutionary properties make them reliable tracers of either very old-, intermediate-age population or star-forming systems, depending on the specific variable type. Knowing their distances, kinematic properties and, possibly, chemical abundances, provides insight on their reference stellar population within a larger system. In fact, variable stars of the IS are widely used as probes of the Milky way evolution and structure, Local Group history and extragalactic distance scales. The downside of using variable stars as probes for any astrophysical investigation is that obtaining their average properties (like the average magnitude or the systemic velocity) is time-consuming, because one needs more observations from the telescope. In fact, if the light-/radial velocity- curve is not well sampled over the pulsation cycle, one cannot fit them to derive their mean properties. However, Light/radial velocity curve templates (LCTs/RVCTs) of variable stars are tools that allow to get mean magnitudes/systemic velocities, respectively, also with as few as one phase point. The aim of the presentation is to make the participants familiarize with LCTs/RVCTs, also by means of a practical session with a jupyter notebook, available on GitHub.