



Erratum: “On the Use of Field RR Lyrae as Galactic Probes. V. Optical and Radial Velocity Curve Templates” (2021, ApJ, 919, 85)

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1. Introduction

We have found an error in the analytical form of the templates in Equations (1) (Section 2.1) and (2) (Section 7.2) of the published article. The sines must be squared and not their arguments. The correct forms of the equations are

$$P(\phi) = A_0 + \sum_i A_i \exp \left(- \left(\frac{\sin(\pi(\phi - \phi_i))}{\sigma_i} \right)^2 \right) \quad (1)$$

and

$$P(\phi; \Delta\phi, \Delta V_\gamma) = \Delta V_\gamma + \text{Amp}(\text{RV}) \cdot \left(A_0^P + \sum_i A_i^P \exp \left(- \left(\frac{\sin(\pi(\phi - \phi_i - \Delta\phi))}{\sigma_i^P} \right)^2 \right) \right) \quad (2)$$

We point out that the error was only in how the equations were written, and not in the form that was employed for calculations. Therefore none of the results obtained within the published article changes.















We have published a python code to easily use the template on https://github.com/vfbraga/RV_RRL_template.












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