



RR Lyrae Research with the Kepler Mission

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The Kepler Mission is a Discovery mission supported by NASA's Science Mission Directorate, and its primary aim is to discover Earth-sized planets in the habitable zone of solar-type stars. The space telescope was designed with a photometer that monitors the Kepler field in a near continuous manner in order to achieve this goal. With this mission, the asteroseismology community also benefits from the Kepler data via the abundant time-series photometry. With a short cadence of 1 minute and long cadence of 30 minute observations, the time coverage for many variable stars is unprecedentedly complete. The Kepler field also contains the archetype RR Lyr, and the Kepler Asteroseismic Science Consortium (KASC) Working Group for RR Lyrae stars have been working to uncover the mysteries surrounding these stars. I will provide an overview of the Kepler program in relation to RR Lyrae research.

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