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Metallicity of Galactic Bulge RR0 Lyrae ANDREA KUNDER, BRIAN CHABOYER, Dartmouth College, PIOTR POPOWSKI, Max Planck Institute for Astrophysics, SERGEI NIKOLAEV, KEM COOK, Lawrence Livermore National Laboratory — We present metallicities of 3092 RR0 Lyrae stars towards the Galactic bulge from the MACHO Survey bulge fields. These [Fe/H] metallicities are based upon a empirically calibrated relationship between the Fourier coefficients of the light curve and [Fe/H]. We find that the 333 RR0 stars from the MACHO bulge fields associated with Sagittarius dwarf galaxy have a lower average metallicity than the RR0 Lyrae stars associated with the Galactic bulge. We investigate the dispersion of the metallicity in the bulge RR0 Lyrae stars and the correlation between metallicity and the location of the stars within the bulge.

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