

ASTEROSEISMOLOGY OF THE ZZ CETI STAR KUV08368+4026

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KUV 08368+4026 was considered a member of a subgroup of ZZ Ceti stars with large amplitudes and common frequencies around a narrow range of 1.6 mHz and 2.0 mHz. As the first effort of asteroseismological study for KUV 08368+4026 since discovery of its variability in 1996, a single-site run in February of 2009 and a 3-site observation campaign from December of 2009 to January of 2010 for the ZZ Ceti star KUV 08368+4026 were carried out in China and Mexico. More than 15,000 images for 28 nights were obtained. 19 frequencies were distinguished in the datasets with 8 frequencies identified as independent modes. These results are critical in determining stellar parameters including mass, rotation period, hydrogen mass fraction, etc., and also helpful in constructing practical stellar and oscillation models, which will bring new knowledge to internal structures of white dwarf stars.