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Spectral types of four binaries based on photometric observations

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Abstract

We present results of photometric and spectroscopic observations of four close binaries with subdwarf B components: PG 0918+029, PG 1000+408, PG 1116+301, PG 0001+275. We discovered that PG 1000+408 is a close binary, with the most probable orbital period being Porb = 1.041145 day. Based on a comparison of the observed light curves at selected orbital phases and theoretical predictions for their variations, all the systems are classified as doubly degenerate binaries with low-luminosity white-dwarf secondaries. © 2008 Pleiades Publishing, Ltd.

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