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A Novel Low-Temperature Phase in Strongly Correlated $CePd_3Ga_8$[1] QING'AN LI, J.F. MITCHELL, K.E. GRAY, Argonne National Laboratory, ROBIN MACALUSO, Northern Colorado College — The specific heat, C_p, of $CePd_3Ga_8$ strongly supports the presence of two phase transitions, which are consistent with magnetization data. The 11 K transition (suppressed for fields, B>3 T) is also seen in the resistivity, whereas the 6 K transition is not. The resistivity is anisotropic both with respect to field and current directions, while its temperature dependence is similar to UCd_{11} and $CeAuSb_2$. Both resistivity and C_p are affected by magnetic fields up to about 30 K and possible connections will be discussed.

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