## Central Bureau for Astronomical Telegrams INTERNATIONAL ASTRONOMICAL UNION

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## LUMINOUS TRANSIENT IN NGC 300

L. A. G. Monard, Pretoria, South Africa, reports his discovery of a variable object (mag 14.2) on unfiltered CCD images taken on May 14.14 UT, the object located at  $\alpha = 0^{\rm h}54^{\rm m}34^{\rm s}16$ ,  $\delta = -37^{\rm o}38'28''.6$ , which is 227" west and 153" north of the core of the Sculptor-group galaxy NGC 300. Nothing is visible at this position on a red Digitized Sky Survey image (limiting mag about 20.5). Additional approximate magnitudes for the variable from Monard's earlier images: 2007 Dec. 30.8, [18.5; 2008 Feb. 8.75, [18.0; Apr. 17.1, [15.5; 24.16, 16.5; May 15.14, 14.2.

Following posting of this object on the Central Bureau's unconfirmedobjects webpage, H. E. Bond, Space Telescope Science Institute; F. M. Walter, Stony Brook University; and J. Velasquez, Cerro Tololo Interamerican Observatory, report that a spectrum (resolution 1.72 nm), obtained on May 15.4 UT with the SMARTS 1.5-m telescope at Cerro Tololo, shows emission lines of  $H\alpha$ ,  $H\beta$ , the Ca II triplet at 854.2, 849.8, and 866.2 nm, and — remarkably — strong emission at the forbidden [Ca II] doublet at 729.1 and 732.3 nm. Ca II H and K are seen in absorption. The Balmer lines are only slightly resolved at the velocity resolution (790 km/s) of the spectra. The mean heliocentric radial velocity of the features is  $\sim +430$ km/s, probably consistent with membership in NGC 300. At an optical absolute magnitude of -12.5, the object is photometrically and spectroscopically not a classical nova, luminous blue variable, or supernova. The spectrum is fairly similar to that of V838 Mon on 2002 Feb. 13 (Wisniewski et al. 2003, Ap.J. 588, 486, Fig. 5) — an object suggested to represent the collision or merger of two stars. Continued spectroscopic and photometric monitoring of this transient in NGC 300 is urged.

## COMET C/2008 J1 (BOATTINI)

Improved parabolic orbital elements for this comet (cf. IAUC 8940) from MPEC 2008-J55: