

Electronic Telegram No. 1697

Central Bureau for Astronomical Telegrams
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SUPERNOVA 2009af IN UGC 1551

Giancarlo Cortini, Predappio, Italy, reports the discovery of an apparent supernova (mag about 15.0) on several unfiltered CCD images (limiting mag about 18.5) taken on Feb. 16.75 UT during his supernova search with a 0.35-m telescope at Monte Maggiore Observatory. The new object is located at R.A. = 2h03m36s.37, Decl. = +24o04'40".9 (equinox 2000.0), which is 15".5 west and 10".4 north of the center of the galaxy UGC 1551. Nothing is visible at this position on Cortini's image taken on 2008 Nov. 15.8 (limiting mag about 18.0) or on red and blue Palomar Sky Survey plates.

Following posting on the Central Bureau's unconfirmed-objects webpage, S. Ciroi and F. Di Mille, Dipartimento di Astronomia, Universita di Padova; M. Carco, M. Rossi, and P. Rosson, Liceo Scientifico Follador di Agordo; and S. Benetti, Istituto Nazionale di Astrofisica and Osservatorio Astronomico di Padova, report that a spectrogram (range 370-720 nm, resolution 1 nm) of 2009af, obtained on Feb. 18.76 UT at Asiago with the Galileo 1.22-m telescope (+ Boller & Chivens spectrograph) -- taken in the framework of the Educational Project of the Astronomy Department "The Sky as Laboratory" (for details, see http://dipastro.pd.astro.it/inglese/projects/progetti_en.html) -- shows it to be a type-II supernova. Assuming a recession velocity of 2671 km/s (Schneider et al. 1992, Ap.J. Suppl. 81, 5; via NED) for the host galaxy, the 'GELATO' spectrum-comparison code (Harutyunyan et al. 2008, A.Ap. 488, 383; available at <https://gelato.tng.iac.es>) provides good fits to spectra of type-II supernovae (SN 1993J included) about 2-3 weeks after explosion. The expansion velocity deduced from the H-alpha absorption is about 14200 km/s.

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