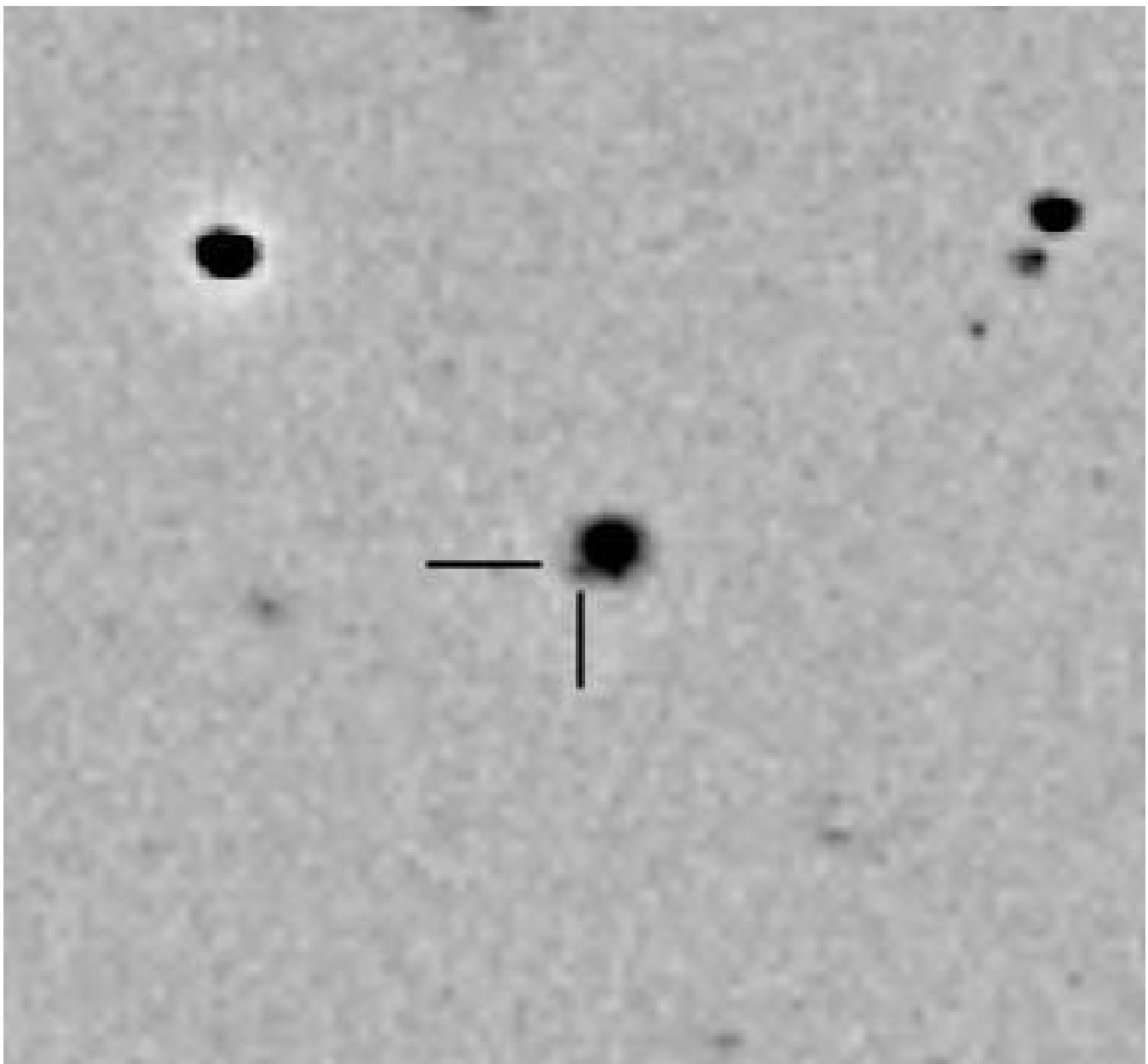


SN2012if (A.R. 11 17 30.29, Dec. +51 24 07.4), scoperta il 20 dicembre 2012 nella galassia pgc 34479 (offset 4E 4S), magnitudine 18.3, tipo Ia ([ATEL 4681](#)).

SN scoperta da A. Dimai con il telescopio S.C. da 11" dell'Osservatorio del Col Drusciè (Cortina d'Ampezzo).



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ASTRONOMICAL UNION CBAT Director: Daniel W. E. Green; Hoffman Lab 209; Harvard University; 20 Oxford St.; Cambridge, MA 02138; U.S.A. e-mail: cbatiau@eps.harvard.edu (alternate

cbat@iau.org

) URL

<http://www.cbat.eps.harvard.edu/index.html>

Prepared using the Tamkin Foundation Computer Network SUPERNOVA 2012if IN PGC 34479 = PSN J11173029+5124074 A. Dimai, Cortina d'Ampezzo, Italy, on behalf of Italian Supernovae Search Project (ISSP), reports the discovery of an apparent supernova (mag about 18.3) on two unfiltered CCD images (limiting mag about 18.8) taken with a 0.28-m telescope at the Col Drusci Observatory on Dec. 20.017 UT. The new object is located at R.A. = 11h17m30s.29, Decl. +51d24'07".4 (equinox 2000.0), which is 4" east and 4" south of the nucleus of the galaxy PGC 34479. Nothing is visible at this position on Palomar Sky Survey infrared, red, and blue plates. The discovery image is posted at the following website URL:

http://www.cortinastelle.it/UGC06309_20121220_pgc34479.jpg

. The variable was designated PSN J11173029+5124074 when it was posted at the Central Bureau's TOCP webpage and is here designated SN 2012if based on the spectroscopic confirmation reported below. Additional unfiltered CCD magnitudes for 2012if: 2012 June 16.9, 18.5 (ISSP; via Dimai); Dec. 20.007, 18.2 (Giancarlo Cortini, Predappio, Italy; 36-cm f/5.5 reflector + SXVR H-9 camera; pre-discovery; limiting mag about 19.0; communicated by Dimai). L. Tomasella, S. Benetti, A. Pastorello, E. Cappellaro, P. Ochner, and M. Turatto, Osservatorio Astronomico di Padova, Istituto Nazionale di Astrofisica, report that optical spectroscopy (range 340-820 nm; resolution 1.3 nm), obtained on Dec. 27.02 UT with the Asiago 1.82-m Copernico Telescope (+ AFOSC), shows that PSN J11173029+5124074 = SN 2012if is a type-Ia supernova. Adopting for the host galaxy (PGC 34479) the redshift $z = 0.033338$ (SDSS Data release 2, 2004; via NED), the best match was found with various type-Ia supernovae, and in particular with supernova 2003du (Anapuma et al. 2005, A.Ap. 429, 667) about six weeks after maximum light. The Asiago classification spectra are posted at website URL

<http://graspa.oapd.inaf.it>

; classification was made via GELATO (Harutyunyan et al. 2008, A.Ap. 488, 383) and SNID (Blondin and Tonry 2007, Ap.J. 666, 1024). NOTE: These 'Central Bureau Electronic Telegrams' are sometimes superseded by text appearing later in the printed IAU Circulars.

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