Circular No. 6776

Central Bureau for Astronomical Telegrams
INTERNATIONAL ASTRONOMICAL UNION

Mailstop 18, Smithsonian Astrophysical Observatory, Cambridge, MA 02138, U.S.A.
IAUSUBS@CFA.HARVARD.EDU or FAX 617-495-7231 (subscriptions)
BMARSDEN@CFA.HARVARD.EDU or DGREEN@CFA.HARVARD.EDU (science)
URL `http://cfa-www.harvard.edu/iau/cbat.html`
Phone 617-495-7244/7440/7444 (for emergency use only)

SUPERNOVA 1997du IN ESO 241-G22

J. Maza, Department of Astronomy, University of Chile, reports the discovery of a supernova ($B \sim 18$) by Roberto Antezana on a plate taken by L. Gonzalez with the Maksutov telescope at Cerro El Roble on Oct. 30.215 UT. SN 1997du is located at $\alpha = 0^{\rm h}10^{\rm m}25\overset{\rm s}{.}43$, $\delta = -46^\circ29'30\overset{''}{.}9$ (equinox 2000.0), which is $10\overset{''}{.}5$ west and $4\overset{''}{.}6$ north of the nucleus of the host galaxy. The object was confirmed by M. Graham (University of Central Lancashire) on a CCD frame taken at Cerro Tololo under nonphotometric conditions using the 0.9-m telescope on Nov. 1.245 and 3.061 (the supernova being 0.1 mag brighter on the latter date).

F. Patat, European Southern Observatory (ESO), writes: "I obtained a spectrogram (range 320–1000 nm, resolution 1.1 nm FWHM) of SN 1997du with the ESO 1.52-m telescope (+ Boller & Chivens spectrograph) on Nov. 25.16 UT; a preliminary reduction of the spectrum shows Hα, Hβ, Hγ, and Hδ lines with shallow P-Cyg profiles. The expansion velocities, deduced from the absorption minima are as high as 8400 and 6800 km/s for Hα and Hβ, respectively. Other detected lines include Na I 589.2-nm, Fe II 501.8-nm and Fe II 516.9-nm, all of them showing P-Cyg profiles. The redshift at the location of the supernova, computed from the narrow H emission lines arising in an underlying H II region, is $z = 0.020$. The blue continuum and these other features are consistent with a type-II classification, $\sim$ 4–6 weeks past maximum light, even if the Hα line is rather weak compared to the other spectral features."

PKS 2155–304

L. Chiappetti, Istituto di Fisica Cosmica e Tecnologie Relative, CNR, Milan; and V. Torroni, BeppoSAX, Rome, on behalf of the BeppoSAX collaboration on Steep Spectrum Blazars, report: "The BL-Lac object PKS 2155–304, which recently entered a γ-ray bright phase (cf. *IAUC* 6774), was observed with BeppoSAX from Nov. 22.62 to 24.03 UT. The quick-look data indicate an approximate flux of 2–3 $\times$ 10^{-10} erg cm^{-2} s^{-1} in the band 2–10 keV, close to the highest level ever reported (Treves *et al.* 1989, *Ap.J.* **341**, 733; Sembay *et al.* 1993, *Ap.J.* **404**, 112). Strong luminosity variability within the observation is clearly apparent. Continuing observations at all wavelengths are urged."

