

**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)
CBAT@CFA.HARVARD.EDU (science)
URL <http://cfa-www.harvard.edu/iau/cbat.html> ISSN 0081-0304
Phone 617-495-7440/7244/7444 (for emergency use only)

S/2005 S 1

C. C. Porco, CICLOPS, Space Science Institute, Boulder; and the Cassini Imaging Science Team report the discovery of a new satellite of Saturn, designated S/2005 S 1, orbiting within the Keeler gap in Saturn's outer A ring. (The object had been previously inferred from the presence of features observed on the outer edge of the Keeler gap; cf. Porco *et al.* 2005, *Science* **307**, 1226, Fig. 10). The object was discovered in six images taken over 16 min on May 1 from a time-lapse sequence of 0.180-s narrow-angle-camera exposures that were targeted to the illuminated side of the outer edge of the A ring (with phase angle $\sim 33^\circ$ and image scale 6.9 km/pixel). S/2005 S 1 was subsequently found in 32 (7 km/pixel) low-phase images taken of the F ring on Apr. 13 (spanning 18 min) and again in two high-resolution (3.54 km/pixel) low-phase images taken on May 2, when its 7-km disk was resolved. The satellite orbits Saturn every 0.594 day at a distance of 136500 km. The estimated geometric albedo is 0.5. The data are too coarse to yield any statistically significant orbital eccentricity or inclination.

V2361 CYGNI

R. W. Russell, R. J. Rudy, and D. K. Lynch, Aerospace Corporation; and W. Golisch, Infrared Telescope Facility (IRTF), report on a 0.8–2.5- μm spectrogram taken of V2361 Cyg (cf. *IAUC* 8483) with the IRTF (+ SpeX) on Mar. 6.66 UT. The calibrator was HD 192538 (an A0 star with mag $V \sim 6.5$). The most prominent aspect of the spectrum was a strong, smooth continuum rising toward longer wavelengths across the entire spectral range — indicative of thermal emission from dust — and the continuum was well-fitted by a 970-K (± 10 K) blackbody. Also present in the spectrum were the following doubled emission lines (2600 km/s FWHM) with prominent red components: He I 1.0830- μm , H I 1.2818- μm , and O I at 0.8446, 1.1287, and 1.3165 μm . H I Pa γ was present but very weak and blended with He I. The reddening, as determined from the O I lines, was $E(B - V) \sim 1.2$ mag, a significant fraction of which may be local to the source.

COMET C/1998 U7 (SOHO)

Another faint Kreutz sungrazer, stellar in appearance (cf. *IAUC* 8519):

Comet	1998 UT	α_{2000}	δ_{2000}	Inst.	F	<i>MPEC</i>
C/1998 U7	Oct. 26.979	13 ^h 53. ^m 4	−15°29′	C3	XL	2005-H24