12^m. Nach *Blažko* ist die Periode wahrscheinlich lang, etwa 12 Monate, vielleicht aber auch nur 6 Monate. Ein Maximum hat im November 1908 stattgefunden.

62. Nova Scorpii 2. Entdeckt von Miss *Cannon* auf Harvard-Aufnahmen (Harv. Circ. 137, A. N. 4273). 1906 Juni 1 war der Stern nicht heller als 11^m, Juni 14 war er 9^m7, nahm dann bis Anfang Juli zu bis zur Größe 8^m8,

worin er etwa einen Monat verblieb, um dann allmählich bis 11^m abzunehmen. Später ist kein Stern heller als 11^m an dieser Stelle gesehen. Vielleicht ist der Stern identisch mit einem Sternchen 11^m, welches auf 193 Platten 1899 Juli 18 bis 1907 Sept. 1 zu erkennen ist und zwar als Doppelstern, dessen südlich vorangehende Komponente heller ist als die nördlich folgende.

Die Kommission für den AG-Katalog der veränderlichen Sterne.

Dunér, Hartwig, Müller.

Elements and Ephemeris of Planet 1908 CW (Newtonia).

This planet was discovered on March 30, 1908, by Rev. *J. H. Metcalf*, who kindly sent me measures of three of his photographs. These I have reduced by a modification of Wolf's method and obtained the following mean places of the planet:

1908 Gr. M. T.	α 1910.0	δ 1910.0	$\theta - \alpha$	Comparison stars
March 30.682986	14 ^h 7 ^m 49 ^s 81	-6° 15' 17".9	-1 ^h 55 ^m 59 ^s	AG Strb 5038, AG Ott 5039
April 24.592708	13 47 22.79	-3 47 12.5	-2 7 21	AG Strb 4943, 4965
May 25.621875	13 26 1.87	-2 9 37.4	+0 58 20	AG Nic 3588, AG Strb 4865.

Proper motion was applied to AG Strb 4865.

With these positions an orbit was computed which gave a residual of -2".2 in the longitude of the middle place. With the first result as a basis, the elements were recomputed and the following orbit was obtained which represents the middle place almost exactly. The formulas and methods of Oppolzer were followed and the usual checks against error were applied.

Elements.

Epoch 1908 April 26.5 Berlin Mean Time.

$M = 298^{\circ} 23' 45''.8$	$\mu = 870''.989$
$\omega = 163 \quad 7 \quad 58.8$	$\log a = 0.406663$
$\Omega = 133 \quad 30 \quad 1.7$	$e = 0.220596$
$i = 4 \quad 5 \quad 50.6$	$m_0 = 13^m.3$
$\varphi = 12 \quad 44 \quad 38.6$	$g = 10.3$

The values of m_0 and g depend upon the only estimate of magnitude known made at Washington May 2, 1908.

Heliocentric Coordinates for 1910.0.

$$\begin{aligned} x &= [9.999416] \cdot r \cdot \sin(\nu + 26^{\circ} 42' 24''.1) \\ y &= [9.971306] \cdot r \cdot \sin(\nu + 297^{\circ} 49' 27''.9) \\ z &= [9.550989] \cdot r \cdot \sin(\nu + 288^{\circ} 52' 2.0) \end{aligned}$$

An ephemeris computed from these elements gives the following comparisons with all the accurate observations known:

1908	$\Delta\alpha$	O - C	$\Delta\delta$	Parallax	α	δ	$\log r$	$\log \Delta$
Mar. 30	-0".05	+0".04	-2".12	+4".27	0.39065	0.17783		
April 24	+0.01	+0.11	-2.47	+4.42	0.37980	0.14659		
May 2	-1.32	-2.78	-1.87	+4.16	0.37626	0.14686		
" 25	-0.40	+0.28	+1.11	+4.09	0.36602	0.17198		

The observation of May 2 was made by Matt Fredrickson. Both the place of the planet and the comparison star used as published in A. J. 603 require a correction of -20".0 in declination. The Taunton position for May 25 printed in A. N. 4260 requires corrections of about +26" and +6".2.

The following ephemeris gives true geocentric places of the planet computed from the foregoing elements without regard to perturbations, referred to the mean equinox of 1910.0.

Ephemeris for Berlin Mean Midnight.

1909	α 1910.0	δ 1910.0	$\log r$	$\log \Delta$
Oct. 6	2 ^h 30 ^m 7 ^s 38	+8° 1' 26".2	0.38718	0.17573
8	28 35.01	7 50 37.3		
10	26 58.08	7 39 39.5	0.38891	0.17324
12	25 17.07	7 28 36.0		
14	23 32.54	7 17 29.7	0.39063	0.17193
16	21 44.97	7 6 24.0		
18	19 54.97	6 55 22.3	0.39235	0.17184
20	18 3.11	6 44 27.8		
22	16 10.01	6 33 43.9	0.39405	0.17302
24	14 16.25	6 23 13.9		
26	12 22.42	6 13 0.8	0.39575	0.17549
28	10 29.08	6 3 7.5		
30	8 36.77	5 53 36.7	0.39743	0.17921
Nov. 1	6 46.03	5 44 31.1		
3	4 57.38	5 35 53.2	0.39911	0.18416
5	3 11.34	5 27 45.4		
7	2 1 28.42	5 20 10.0	0.40077	0.19027
9	1 59 49.08	5 13 9.2		
11	58 13.78	5 6 44.8	0.40243	0.19748
13	56 42.94	5 0 58.5		
15	55 16.91	4 55 51.6	0.40407	0.20569
17	53 56.04	4 51 25.2		
19	52 40.66	+4 47 40.4	0.40570	0.21478

Opposition Oct. 25, magnitude 13^m1.

I am indebted to Professor Henry Norris Russel for valuable advice in reducing the photographic measures and computing the orbit.

With the consent and approval of the discoverer, I desire to name this planet Newtonia.

Princeton University Observatory, Princeton, New Jersey, 1909 Oct. 1.

Zaccheus Daniel.