This ephemeris shows the value, z , of the invisible line of sight coordinate, as well as the rate, Δ , at which this increases in four years. This latter quantity is required by spectroscopists, who wish to determine the parallax by comparing Δ with the line of sight velocity expressed in diameters of the earth's orbit per annum. Owing to the moderate value of the inclination of the orbit of σ Coronae it is perhaps not likely that the latter quantity will be measured for

some years, but I am computing the same data for other binary stars. Taking the hypothetical parallax into account hints may thus be obtained as to which binary stars are most suitable for observing the difference between the line of sight motion of the two components. The hypothetical parallax is equal to 0".064 but the actual parallax is probably smaller, and the mass of this system is probably greater than the mass of the sun.

Hongkong Observatory, 1905 May 14.

W. Doberck.

Observations of Jupiter's sixth satellite

from photographs taken with the 30inch reflector of the Thompson equatorial at the Royal Observatory, Greenwich.

1905	Gr. M. T.	ϕ	s	Tab.—Obs. *)		Exp.
		ϕ	s	ϕ	s	
Aug. 23	13 ^h 30 ^m	311° 9'	25' 30"	—	—	30 ^m
23	14 23	310 45	25 33	—	—	31
Sept. 3	15 17	290 51	36 59	+4.8	-0.5	40
7	13 26	286 54	40 52	+3.9	-1.0	60
7	15 32	286 48	40 54	+4.0	-1.0	55
8	12 56	285 54	41 43	+3.7	-0.9	30
12	14 37	281 29	45 16	+4.0	-1.5	20
12	15 5	281 26	45 17	+4.0	-1.5	20
12	15 42	281 32	45 17	+4.0	-1.5	30
30	12 17	267 34	54 53	+3.2	-0.6	60
Oct. 4	12 25	264 51	55 29	+2.8	-0.5	40
4	16 38	264 41	55 31	+2.9	-0.5	39
5	11 52	264 3	55 33	+2.7	-0.5	30

Royal Observatory, Greenwich, 1905 Oct. 7.

*) Vgl. die Ephemeride von F. E. Ross A. N. 4042. Kr.

The photographs were taken by Mr. *Melotte*, with the exception of two taken by Mr. *Edney* (Sept. 8 and Oct. 4) and two taken by Mr. *Davidson* (Oct. 5).

Supplementary exposures were given on several of the plates for determination of orientation, and the position angles were inferred from these by reference to a pair of stars common to all the plates.

The over-exposed image of Jupiter was reduced with ferri-cyanide of potassium, leaving a reversed image which was easily measurable.

The measures of position angle and distance from Jupiter, made in the position micrometer, are to be considered as merely provisional pending more complete measures with the help of reference stars. No corrections have as yet been applied for differential refraction or aberration.

Elementi del pianeta (554) Peraga.

Il pianeta Peraga scoperto da P. Götz a Königstuhl-Heidelberg l' 8 Gennajo 1905 fu osservato in questa prima apparizione, per quanto è a mia conoscenza, ad Arcetri, Düsseldorf, Padova, Roma, Vienna. Con le tre osservazioni fatte a Padova all'equatoriale Dembowsky, due dal prof. Antoniazzi nelle notti 13 Gennajo e 24 Febbrajo ed una da me nella notte del 3 Febbrajo, seguendo il metodo di Encke-Tietjen, ho ottenuto questi elementi:

Epoca 1905 Gennajo 0.0 t. m. Berlino.

$$\begin{aligned} M &= 39^{\circ} 15' 59''.8 \\ \omega &= 127 44 38.4 \\ \Omega &= 295 39 11.9 \\ i &= 2 53 23.1 \\ \varphi &= 8 27 41.0 \\ \mu &= 976''.034 \\ \log a &= 0.373695 \end{aligned} \quad 1905.0$$

Una effemeride calcolata su questi elementi per l'intervallo di tempo dal 10 Gennajo al 13 Marzo 1905 mi ha permesso di calcolare le differenze O—C in ascensione retta ed in declinazione per ciascuna delle 58 osservazioni ese-

guite nel predetto intervallo e nei luoghi sopra indicati. Tali differenze furono raggruppate nei tre seguenti luoghi normali fondati rispettivamente sopra 18, 22, 18 osservazioni considerate tutte come di uguale peso:

T. m. Berlino 1905	O—C		1905.0	
	$\Delta\alpha$	$\Delta\delta$	α	δ
Gen. 17.5	-0.46	-0.8	8 ^h 23 ^m 51.96	+18° 51' 25".8
Febr. 8.5	+0.33	-3.7	8 1 11.84	+19 25 37.9
Marz. 6.5	-2.17	+5.3	7 50 15.65	+19 28 7.1

Partendo da questi tre luoghi ho ricalcolato l'orbita ed ho ottenuto gli elementi eclittici:

Epoca 1905 Gennajo 0.0 t. m. Berlino.

$$\begin{aligned} M &= 41^{\circ} 20' 15''.3 \\ \omega &= 124 25 29.3 \\ \Omega &= 295 43 16.2 \\ i &= 2 56 13.2 \\ \varphi &= 8 54 53.0 \\ \mu &= 969''.164 \\ \log a &= 0.375740 \end{aligned} \quad 1905.0$$