

## SOLAR ACTIVITY—(continued)

Twenty-five displacements in prominences were observed with the spectrohelioscope as against 86 during the previous year. Of these, 14 were on the north and 11 on the south, while 13 were in the east limb and 12 in the west limb.

An eruptive prominence photographed on April 15 in the east limb, reached a maximum height of 4 minutes.

## COMETS

During the year 1944 three new comets have been discovered and one periodic comet has been detected. A comet discovered by Berry at Dunedin on September 13 has not been included in the list as nothing further has been heard about it. The international situation is still responsible for a certain amount of delay in announcing discoveries and elements of orbits, when such have been computed.

*Elements of the Orbits of Comets*

| Comet      | <i>T</i> (U.T.)    | $\omega$    | $\Omega$    | <i>i</i>    |
|------------|--------------------|-------------|-------------|-------------|
| Schaumasse | 1943 Dec. 1.457    | 50° 59' 07" | 86° 44' 28" | 12° 00' 01" |
| Väisälä    | 1944 Dec. 27.814   | 238 46 00   | 28 53 00    | 16 42 00    |
| Dutoit     | 1944 June 17.49027 | 257 00 39.6 | 22 22 55.0  | 18 45 08.4  |
| van Gent   | 1944 July 17.67367 | 337 00 11.1 | 202 43 24.4 | 95 00 56.3  |

## DOUBLE STARS

*New Pairs.*—Rossiter (*Publ. Obs. Univ. Michigan*, 9, No. 1) has published his fifth list of new Southern Double Stars. Kuiper (*Ap. J.*, 97, 275) gives 6 new binaries with large proper motion. Luyten (*Ap. J.*, 100, 202) has a note on the double white dwarf LDS 275. Leonard (*P.A.S.P.*, 55, 241) announces the duplicity of BD -1°4043. Joy and van Biesbroeck (*P.A.S.P.*, 56, 123) give five new double stars among variables of the T Taur class and van Biesbroeck (*A.J.*, 51, 61) gives a new companion to Wolf 1055 as the star of lowest known luminosity.

*Measures.*—Hirst (*M.N.*, 103, 331) gives micrometer measures with the Cape 7-inch and Johannesburg 26½-inch refractors, Wesselink (*B.A.N.*, No. 341) photographic measures with the Yerkes 40-inch, and Brouwer and Jenkins (*A.J.*, 51, 54) measures of  $\Sigma$ 2398 on parallax plates with the same refractor.

*Orbits.*—Hirst (*M.N.*, 103, 337 and 344) computes orbits for ADS 16497 and Melb. 4 AB, and gives a method of applying differential corrections. Campa (*Mem. Soc. Ast. Ital.*, 14, No. 4) gives an orbit for ADS 7744, Gennaro (*Publ. Padova Obs.*, 66) for ADS 9494, Durham (*A.J.*, 50, 165) for ADS 10087, and Alden (*A.J.*, 51, 59), from measurements on parallax plates, for  $\delta$  Aquilæ.

*Miscellaneous.*—van de Kamp and Strand (*A.J.*, 51, 7 and 12) give notes on the astrometric study of unseen companions of single and double stars. Leonard (*P.A.S.P.*, 56, 38, 85 and 202) determines the spectra of ADS 2894 and 12882. Wallenquist (*Arkiv Mat. Astr. Fys.*, 30A, No. 8) publishes photometric observations of double stars. Schilt (*A.J.*, 51, 189) gives some remarks about the mass ratios of *Castor* and 70 Ophiuchi.

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