marked in figure 1, is situated in a dark cloud which seems to be associated with NGC 6334. It has the highest observed polarization, ($p_v$ = 10.70 % ± 0.60 % and 11.5 % after subtracting the foreground polarization) which exceeds those of the other stars observed in NGC 6334 by a factor 3 to 4. However, its extinction is only about $2^m$ higher. This indicates that in the dark cloud the conditions for polarizing the star light are very different from those in the H II region. A similar behaviour was found in M 17, where all extremely high polarization values are observed in the dark cloud associated with M 17 (Lenzen and Schulz, 1979). A hint about an unusual mechanism for this high polarization may be expected from its wavelength dependence. Because star 34 was observed for the first time during the last of my 3 polarimetric nights, only 1 measurement in U, B, and V respectively could be made. Usually the polarization has its maximum at about 5500 Å. For star 34, however, the highest value was found in the ultraviolet, $p_u$ = 13.0 % ± 3.6 %. Because of the faintness of star 34, U = $15^m5$, the wavelength dependence of p for this star still needs further observations.

## NGC 6302

NGC 6302 is very peculiar in many respects. Although listed in the catalogue of planetary nebulae by Perek and Kohoutek, it is clearly not a typical planetary nebula, as pointed out already by Minkowski and Johnson (1967). Short-exposure photographs of this bipolar nebula show a dark lane between the two lobes (see Minkowski and Johnson, 1967). An excellent photograph of NGC 6302 is published in the ESO *Messenger* 15, p. 11. NGC 6302 is one of the most highly excited gaseous nebulae known. From the relative halfwidths of the [N II] and H α profiles, Elliott and Meaburn (1977) found in the centre of NGC 6302 the extremely high electron temperature $T_e$ = 26,700 K. $T_e$ values > 20,000 K are unlikely even when radiatively excited by a star with a surface temperature of $10^5$ K. Therefore, the high $T_e$ value in NGC 6302 indicates collisional excitation. As the possible source of energy a star has been suggested, which emits an energetic stellar wind. However, no central object has been found up to now. During my 3 polarimetric nights in June 1979 I have measured the polarization at 3 points in NGC 6302: in its centre as well as in the brightest parts of the lobes using a 16" diaphragm. In the centre the polarization is found to be below 1 %. In the lobes however, much higher values have been found, up to 5 %, and the directions of p are nearly vertical to the directions to the centre. Therefore the light of NGC 6302 must be partly scattered light from the central source, surrounded by dust, which is optically thick in the line of sight but not in the directions to the lobes. The simplest model is a dust disk seen edge-on similar to those in "Minkowski's foot print" or S106.

NGC 6302 is surrounded by many extremely red stars. The dust, which is responsible for their high reddening, appears to be quite distant, because also many unreddened stars in the same region are present. If NGC 6302 is physically related to this dust cloud, it also cannot be nearby. So it seems probable that the nearness of NGC 6302 to the H II regions NGC 6334 and NGC 6357 is not a projection effect, but they are in reality "neighbour" objects in the Sagittarius spiral arm.

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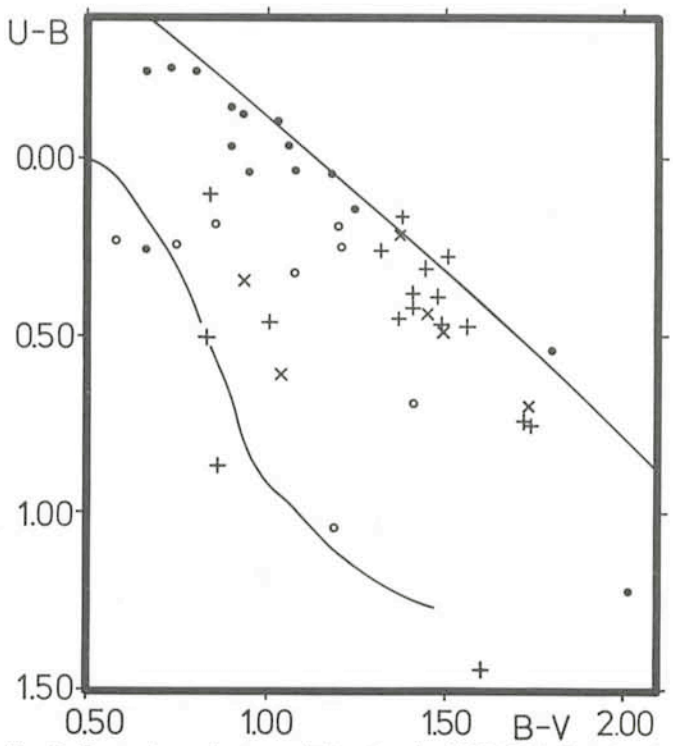


Fig. 2: *Two-colour diagram of the stars in NGC 6334 (dots) and NGC 6357 (upright crosses for stars in G353.2+0.9, diagonal crosses for stars in G353.1+0.7 and open circles for stars outside the compact radio sources). The two lines are the reddening line for an O5 star and the unreddened main sequence.*


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## Tentative Time-table of Council Sessions and Committee Meetings in 1980

The following dates and locations have been reserved for meetings of the ESO Council and Committees:

| | |
|---|---|
| January 21–22 | Finance Committee, Geneva |
| (February 6 | Council, Geneva) |
| (April 17–18 | Finance Committee, Geneva) |
| May 20 | Users Committee |
| May 21 | Scientific/Technical Committee, Geneva |
| May 22 | Committee of Council, Geneva |
| June 2–4 | Observing Programmes Committee, Geneva |
| June 18–19 | Finance Committee, Brussels |
| June 20 | Council, Brussels |
| November 4 | Scientific/Technical Committee, Munich |
| November 5–6 | Finance Committee, Munich |
| November 7 | Committee of Council, Munich |
| November 27–28 | Council, Munich |
| December 2–4 | Observing Programmes Committee, Munich |