

DISCUSSION ON THE PAPER BY **FABBIANO ET AL.** (p.85)

**Filippenko** : When comparing broadband colors of Seyfert 1 nuclei, how did you account for the very different effective apertures of the IRAS, near-IR, and optical data ?

**Fabbiano** : We subtracted the stellar contribution by using CCD images at R, and M31 bulge colors when possible, otherwise assuming a de Vaucouleurs profile for the bulge and using Young's (1976?) tables. We did not correct the IRAS data. The 60 and 20  $\mu$  IRAS and ground based points are typically within 20% of each other, and this would not affect our conclusions. The four IR points (100  $\mu$ , 50  $\mu$  ..... ) are definitely indicative of galaxy disk emission in low luminosity objects.

DISCUSSION ON THE PAPER BY **DE RUITER & LUB** (p.89)

**Khachikian** : Have you any data about Sy 2 Galaxies ?

**De Ruiter** : We have observed six type 2 Seyferts, of which four regularly in the period 1979-1982. We did not find any variations and stopped observing the type 2 Seyferts after 1982.

DISCUSSION ON THE PAPER BY **ROBERTS ET AL.** (p.91)

**Dultzin-Hacyan** : The variability can be strongly frequency dependent. We published optical data for periodicity in OJ 287, they appeared in Nature, simultaneously with the Finnish group results, and we are pretty sure of our results.

**Roberts** : The results I presented pertain to  $\lambda\lambda 6, 2,$  and 1.3 cm only. A coordinated world-wide program to observe OJ287 at all wavelengths from optical through decameter radio would help sort out the existence, variability, and frequency dependence of any periodic variations in OJ287.

**Rees** : The magnetic field within (say)  $10^{14}$  cm of an accreting massive black hole could be  $10^4$ - $10^6$  gauss. The variable radiation observed could then be at the Larmor frequency. We know that coherent emission at the cyclotron frequency is more readily produced than in the case of synchrotron radiation by ultra-relativistic particles. The inferred brightness temperatures could then arise if the source contained a large number of regions, each large enough to act coherently, and the overall properties of the entire system varied quasi-periodically. To explain the lack of high overall circular polarization, the field must be disordered,

or the plasma a mixture of electrons and positrons. The main problem with this interpretation is that the postulated coherent emission would be vulnerable to incoherent synchrotron absorption and induced Compton scattering by plasma further out.