and enhanced abundances of nucleosynthetic products. Free electrons in the WR wind can polarize the light from the central star. However, the *net* polarization will only be non-zero in the case of an asymmetry, e.g. a binary.

We have begun to monitor several binary WR systems for phase-dependent modulation of intrinsic linear polarization. A good example is the single-line spectroscopic binary HD 197406 which reveals such modulation with an amplitude of ~0.4 per cent. Detailed analysis yields an orbital inclination $i = 67°$. Combined with the mass function, this gives a mass of 12 $M_\odot$ for the unseen companion, assuming a mass of 60 $M_\odot$ for the luminous WN-type primary. This and the fact that HD 197406 is located ~800 pc above the galactic plane makes a good case for a black-hole companion. In many respects, HD 197406 resembles Cyg X − 1, except that HD 197406 is not an X-ray source.

The Three Parallel Radio Sources in the Field of 3C130, Alan H. Bridle, NRAO, Charlottesville, Virginia, U.S.A.

Jägers (1983, *A. and A* **125**, 172) discovered that the narrow edge-darkened radio source 3C130 has two parallel companion sources with similar edge-darkened morphologies. He proposed identifications with three elliptical galaxies which may be members of the same cluster. The outlying galaxies would be only a few Mpc from 3C130 if all three are indeed in the same cluster.

Three explanations of the parallelism are possible: 1) it is a coincidence, or "statistical mishap"; 2) the radio-source collimators in the three galactic nuclei all share a common orientation, perhaps reflecting memory of primordial conditions affecting the formation of all three galaxies; 3) the sources are images of the same object formed via gravitational lensing by the Perseus Supercluster, as suggested by Sanders, van Albada and Osterloo (1984, *Ap. J.* **279**, L91).

New VLA maps of the three sources make the third explanation (which requires an unexpectedly high linear density in the Perseus Supercluster) very unlikely. They also suggest a new identification for the southern source. The second explanation is still viable, however, and is encouraged by the discovery of other parallel radio source groups in the directions of galaxy clusters at the VLA (3C219 and a previously unknown neighbour – A.H. Bridle and R.A. Perley, to be published) and at Fleurs (0214–480 and two neighbours – White, McAdam and Jones (1984, *Proc. ASA* **5**, 507). Optical spectroscopy of the parent galaxies of such parallel radio sources is now needed to test the second explanation.

Strong Cyanogen Stars: The Result of Binary Coalescence? Bruce Campbell, DAO.

Late-type giants with anomalous CN band strengths are found in the field ("super-metal-rich" stars), open clusters, and globular clusters. No satisfactory explanation of these stars has emerged, despite intensive study. We propose that the coalescence of close binaries could result in such anomalous stars, if the surface layers of the remnant are contaminated with core-processed material from the disrupted star. For this process to explain CN anomalies in globular clusters would require a large initial population of binaries. We consider reasons why many binaries are not now observed in these old systems.

Encounters Between the Solar System and Giant Molecular Clouds, Martin Duncan, Scarborough Campus, U. Toronto.

Several authors have suggested that the Oort comet cloud has been repeatedly disrupted by gravitational encounters between the Solar System and Giant Molecular Clouds (GMCs). Recent suggestions of correlations between terrestrial biological extinctions and cometary impacts further motivate detailed investigations of the dynamical influence of GMCs on comets and the proposed solar companion star (Nemesis).