ABSTRACTS OF CONTRIBUTED PAPERS

- 1. The raddii of light white dwarfs with DA spectra should be larger than those predicted by the mass-radius relation for  $\mu_e$  = 2.
- 2. Among light white dwarfs, those with DA spectra should be comparatively fast rotators.
- 3. White dwarfs in young stellar systems should have DA spectra.

The nuclear deflagrations that cause the ejection of the shells are possibly ignited by meteorites hitting the black dwarfs.

THE HERBIG-HARO OBJECTS - BREAKUP OF PROTOSTELLAR COCOONS

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From a large body of data gathered on the 3.9 metre AAT and the 2 metre and 76 cm telescopes at Mount Stromlo including absolute photometry, quantitative spectrometry and studies of internal velocity fields, the Herbig-Haro objects are shown to be radiating shock fronts in the ISM. Physical conditions are found by comparison with theoretical models of plane-parallel shock fronts. Shock velocities in the range 30-150 km/sec are observed, and the densities in the interstellar clouds in which the objects are embedded found to be 80-400 cm<sup>-3</sup>. Extinction at H<sub>β</sub> ranges up to 4.4 mag. Parameters are found to be consistent with the radiation pressure driven breakup of a dust cocoon around a newly formed B-type star.

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