



Fig. 2: The observed spectrum of β Hyi and theoretical Li line profiles (dots) for three isotope ratios. The (VI ?) line at λ 6707.43 in the violet wing of the Li line was not included in the theoretical profiles.

of the last observation while integrating on the next star, and trying occasionally to remind ourselves what a disgusting place the smelly interior of a darkroom used to be in the old days. On

Vibrations of Be Stars

D. Baade, ESO

Be Stars – Observed for More than a Century...

Two well-attended IAU symposia in 1975 and 1981 (in the respective proceedings the interested reader may find all relevant references) and an IAU colloquium being planned for the mid-eighties, all three devoted exclusively to Be and shell stars, show that stellar astronomers take a very active interest in these strange objects. The first Be star, γ Cas, was identified as such by Secchi as early as 1866, and today 2–3% of all stars in the Bright Star Catalogue are known to belong to this class. The amount of observational data that has been accumulated is therefore vast, and at all times it has been of the best technical quality. For this reason we are now at a stage where for more and more of these stars it becomes possible (or tempting) to search for periodicities in the (sometimes spectacular) spectroscopic variability exhibited on time scales of years by many Be stars. The idea is that these stars might be binaries and that the mass exchange between the two components is the origin of the line emitting shell around the B-type primary. But for many objects it may well take a few more

ANNOUNCEMENT OF AN ESO WORKSHOP ON

“THE VIRGO CLUSTER OF GALAXIES”

to be held in GARCHING, September 1984

A large amount of observational and theoretical work has been done on this cluster. The workshop is intended to bring together people with a wide range of experience in an attempt to resolve some of the important controversies such as the membership definition, distance estimates, or the density contrast to the local environment, etc.

Both review papers and short contributions will be given, and there could be two panel discussions (if there is enough interest) on (a) dependence of conclusions on membership assignment to individual galaxies, and (b) differences between Virgo cluster galaxies and “field” galaxies: signs of different evolution or different formation?

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the whole, our run was a very convincing demonstration of the quality and efficiency of this new facility, and Daniel Enard and his colleagues are to be cordially congratulated on this achievement. We trust that our readers will, in the end, share our preference for the kind of excitement derived from new, interesting results rather than from ever so picturesque disasters.

decades to distinguish with some certainty between true and spurious periods. So far, there is no indication that the binary frequency of Be stars is any higher than the one of “normal” B stars which itself is roughly the same as for O through G type stars.

... and Still Not Understood

In the past couple of years, the discovery of a hot superionized wind with the COPERNICUS and IUE satellites, ground-based polarimetry and extensive model calculations have enormously improved our understanding of the dynamics, structure, dimensions, and thermodynamics of the circumstellar shell. But all this does not help explaining why some B stars, namely the Be stars, possess a shell and the others do not. Up to now, only the binary model can offer an inherent and plausible answer (mass exchange) to this question. But in view of the relatively small number of confirmed binaries, one should not too readily take a possibility for the fact.