

around 1000 K, they all have Fe II and mostly also [Fe II] emission lines. The photospheric absorption lines are weak or absent in all stars of this group. The stars with dust shells tend to show only small variations, both photometrically and spectroscopically. All this suggests that the supergiant B[e] stars with dust shells form a group of stars that is quite different from the P Cyg and Of-like stars.

A more detailed paper will appear in the Supplement Series of Astronomy and Astrophysics.

MWC 300: A RUNAWAY HYPERGIANT

B. Wolf, O. Stahl
Landessternwarte
Königstuhl
6900 Heidelberg
West Germany

We analysed highly resolved CASPEC spectra with a high S/N-ratio of the peculiar emission-line B-star MWC 300, which is surrounded by a circumstellar dust shell. These high quality spectra enabled us to study the photospheric spectrum of MWC 300. By comparing the absorption spectrum of MWC 300 with the ones of early B supergiants we found a close resemblance with the B1 hypergiant HD 169454. We also found luminosity sensitive fluorescence lines of Fe III 115 and 117 both in MWC 300 and in the most luminous stars of our sample, confirming the hypergiant nature of MWC 300. We estimated an absolute visual magnitude $M_V = -8$ for MWC 300. Assuming a bolometric correction of B.C. = -1.5 mag we derive $M_{bol} = -9.5$. This shows that MWC 300 is very similar to the B e supergiants of the Magellanic Clouds. From its absolute magnitude we derive a distance of $z = 560$ pc from the galactic plane. It is conjectured that MWC 300 is a runaway hypergiant, released via a supernova explosion in a very massive binary star system.