

Figure 5: The cross-correlation dip of a K2 III star of magnitude B=10.4 after 60 sec of integration. After such a short exposure, the radial velocity uncertainty is about 0.5 km/s.

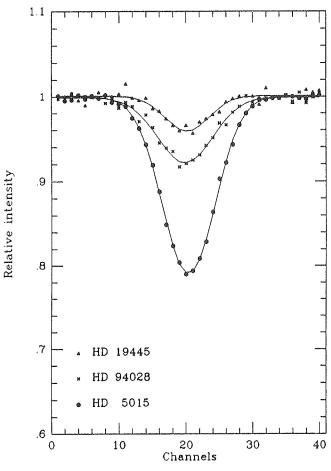


Figure 6: The cross-correlation dips of three stars having about the same temperature, but quite different metallicities. The (Fe/H) are respectively +0.1, -1.4 and -1.8 for HD 5015, 94028 and 19445. Such a comparison shows the extreme sensitivity of the dip surface with metallicity.

time by ESO and by the Danish Board for Astronomical Research, we are rather confident that all the red stars in the southern hemisphere of the Hipparcos mission will have known radial velocities in five or six years.

## References

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## **PISCO Modifications**

Recently, the software for PISCO has been extensively modified and improved. This has had the following effects:

- reliable on-line reduction
- possibility of hard copy of on-line data
- simplified calibration procedure
- simplified exposure definition form
- various bugs removed

During the night, the on-line results can now also be printed; this is useful for planning the next night's work. On-line reduction now works with the proper Fourier transform method and gives an accurate impression of the data quality obtained. It can be used with or without automatic sky subtraction.

The calibration menu has been simplified and is therefore more user-friendly, as is also

the exposure definition form. Finally, some bugs were removed from other parts of the software.

The PISCO Observer's Manual is now available (ESO Operating Manual No. 13).

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## Joint ESO/CTIO Workshop in 1990

The European Southern Observatory and Cerro Tololo Interamerican Observatory will hold a joint workshop on "Bulges of Galaxies" in the period January 16-19, 1990, in La Serena, Chile.

The emphasis will be on the interaction between theory and observations of bulges of galaxies. Topics will include: dynamics and kinematics, stellar populations, chemical evolution and the bulge/disk/halo connections. The meeting will be in the form of relatively long invited reviews, shorter contributed papers and posters.

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