reduction of the digitized spectra was performed on the PDP11/34 computer at the same Institute. While the wavelength and intensity calibrations were easily performed on all spectra, the determination of the radial velocities proved to be very tricky because of the low dispersion and the high rotational broadening of the spectral lines. Therefore an 'ad hoc' data processing code is under development, and hence the analysis of the spectra has not yet been completed.

The result of this work will be published, when completed, in the Astronomy and Astrophysics Supplements.

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**Fiber Optics at ESO**

**Part 2: Fiber Optics Multiple Object Spectroscopy at the 3.6 m Telescope**

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During a 6-day test period late in November 1982, a prototype optical fiber device (nicknamed "Fiber Optopus") was tested at the 3.6 m telescope Cassegrain focus. The principle of this device, described in more detail in the following paragraphs, is such that the light from up to 50 randomly separated points on the sky (within the Cassegrain focus field of view) can be simultaneously guided via separate flexible optical fibers to the entrance slit of the B&C spectrograph. By making use of a two-dimensional detector such as a CCD the individual spectra, corresponding to each sampled point on the field, can be recorded simultaneously. When fully operational, the Fiber Optopus should enable a very strong reduction in telescope time to be achieved in observing programmes involving low resolution spectral mapping of extended fields. This feature will be of great interest to astronomers wishing to observe clusters of faint objects requiring long integration periods.

**Technical Description**

The prototype system, represented schematically in fig. 1, depends on the following essential components:

- the Fiber Optopus containing 50 free optical fibers, appropriately terminated in magnetic connectors,
- a starplate for the particular field to be viewed,
- three coherent fiber bundles and a TV camera for guiding,
- the Boiler and Chivens spectrograph,
- a two-dimensional detector (CCD).

In addition, auxiliary calibration lamps, power supplies and a handset for the remote control of these functions and of the TV camera are provided. A description of the instrumental components developed specially for multiple object spectroscopy is given below.