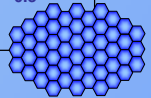


Multiplex spectral resolution aperture and on sky sampling for the 4 observing modes

Observing Mode	Multiplex	Spectral resolution	Aperture	Microlens sampling on sky
Mono-Object Low Resolution	240	5000	0.9''	0.3''
Mono-Object Medium Resolution	70	15000	0.9''	0.18''
Mono-Object High Resolution	40	30000	0.81''	0.09''
Medium IFU Low Resolution	30	5000	1.8'' x 3''	0.3''



OPTIMOS-EVE concept:

- optical to near-infrared (370-1700 nm) spectroscopy
- 3 spectral resolutions (5000, 15000 and 30000)
- high simultaneous multiplex (at least 200)

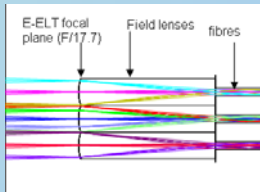
Optical fibre link: 4 kind of bundles

- several hundreds of mono-object systems with three types of bundles fibre size being used to adapt slit width, and thus spectral resolution
- 30 deployable medium IFUs (about 2''x3'')

MO-HR FIBRE PROTOTYPE

The realization of a prototype of the Mono-Object High Resolution button (52 fibres) validate the feasibility of the button with small fibres (67µm core fibres to be realigned properly on a slit).

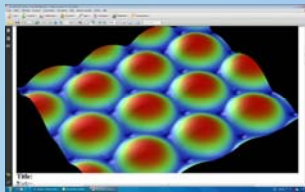
Injection : with field microlenses



- Pupil image on the fibre core
- Permits to avoid field losses due to gaps between cores



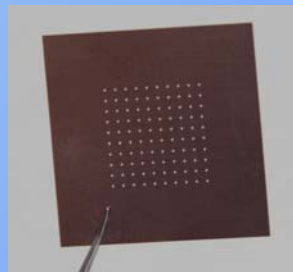
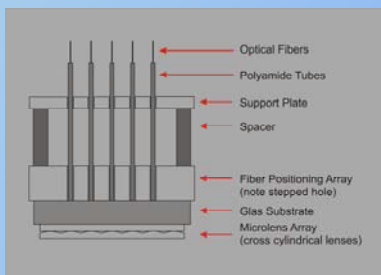
Gluing of the fibres into the tips by SEDI



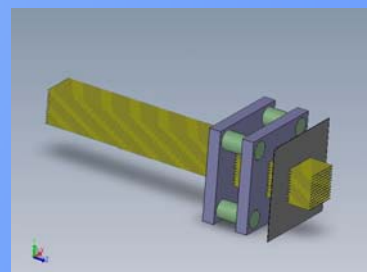
Microlenses array manufactured by AMS

IFU FIBRE PROTOTYPE

A new prototype will be made in collaboration with the LNA with the technique of the mask instead of the mechanical piece at the ends.



Mask of micro holes in nickel plate made with the technique called electro formation. The error in the diameter and in the positions of the holes is around 1 µm.



Entrance device during the assembling step, where the matrixes of holes in the composite plate set and in the precision mask are populated with the optical fibres terminaisons.

Schematic of the fibre-positioning array concept

