

VEGA Observing modes

January '09

2T only at that time. 3T/4T modes are in an exploring state, especially regarding data processing.

LR (MR,HR) means Low (Medium, High) spectral resolution, i.e. 1700 (5000,30000)

1. Differential visibility

- a. MR:
 - i. H β in blue channel, H α in red channel
 - ii. Continuum in blue channel, H α in red channel
 - iii. Continuum in blue channel, HeI (720nm) in red channel
 - iv. free wavelength
- b. HR:
 - i. Spectral line on blue or red channel (depending of domain, wrt difference of sensitivity). The second channel is used in the continuum.
- c. LR (not really adapted)
 - i. Choice of wavelength. Only red channel.

2. Mode V²

- a. LR :
 - i. Lambda (red) around 620
- b. MR :
 - i. Lambda (red) among 690, 720 or 740
- c. HR:
 - i. Only adapted for bright objects in this mode.

3. Mode SPIN (polarization)

- a. To be discussed

Preliminary estimations of performances

Mode	Band	Typical limit Mag=	Best performance Mag=	At Spectral Resolution R=
VEGA	1 band of 150nm in [480-820]	6.5	7.2	1700
	2 bands of 30 and 45nm, separated by 145nm, in [480-820]	5.5	5.8	5000
	2 bands of 5 and 8 nm, separated by 20nm, in [480-820]	3,5	4,2	30000

<http://www.oca.eu/gemini/projets/vega/en/observations/index.htm>