## The new outburst of the Be star $\omega$ Ori

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1) The Be star  $\omega$  Ori entered in strong outburst. It apparently started in september. The H $\alpha$ -line is currently at 2 times the continuum in emission.

The FeII lines are also in emission and visible all around the spectrum. It is thus a very interesting spectrum to take and a very interesting star to follow in the coming weeks and months.

One can read Neiner et al. 2002 (A&A 388, p. 899) to know everything about the star, its pulsations and the long-term evolution of its emission.

One can also read Neiner et al. 2003 (A&A 409, p. 275) to know everything about the rotation and magnetism of this star.

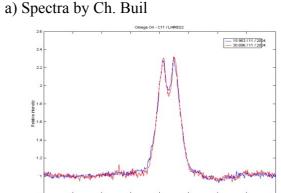
C.Neiner

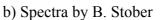
2) Graphical form of  $\omega$  Ori spectra for the date 15/11/2004 and 30/11/2004. Low evolution is noticed at the resolution of R=16 000.

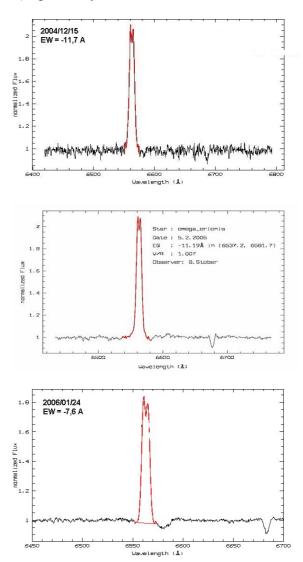
The measured equivalent width for the 30/11 observation is 10.0 + 0.2 Å, very similar to the Ernst Pollmann evaluation (10.3 Å).

Ch.Buil

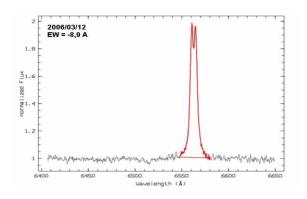
**3)** H $\alpha$ -spectra by Ch. Buil and the VdS-spectroscopy group (Germany)



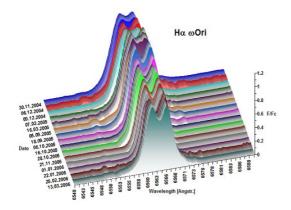




## c) Spectra by L. Schanne

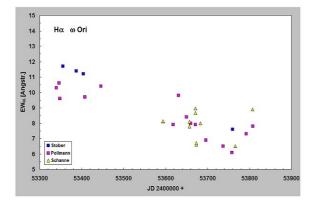


d) Spectra by E. Pollmann



**4**) Measurements of the H $\alpha$ -Äquivalentwidth

<u>E. Pollmann:</u> 20 cm Schmidt-Cassegrain Telescope; Dispersion: 0.25 Å/Pixel <u>B. Stober:</u> 30 cm Newton Telescope; Dispersion 0.6 Å/Pixel <u>L. Schanne:</u> 15cm Telescope; Dispersion 0.6 Å/Pixel



5) Measurements of the intensity maxima of the V- and R-component of the H $\alpha$ -peak

