

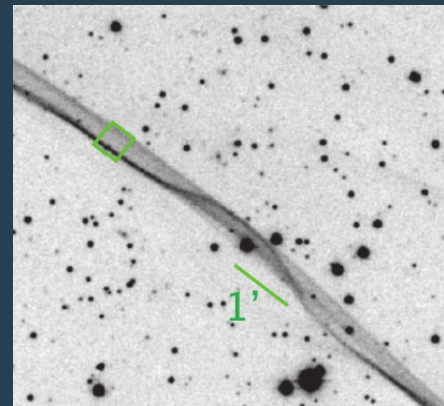
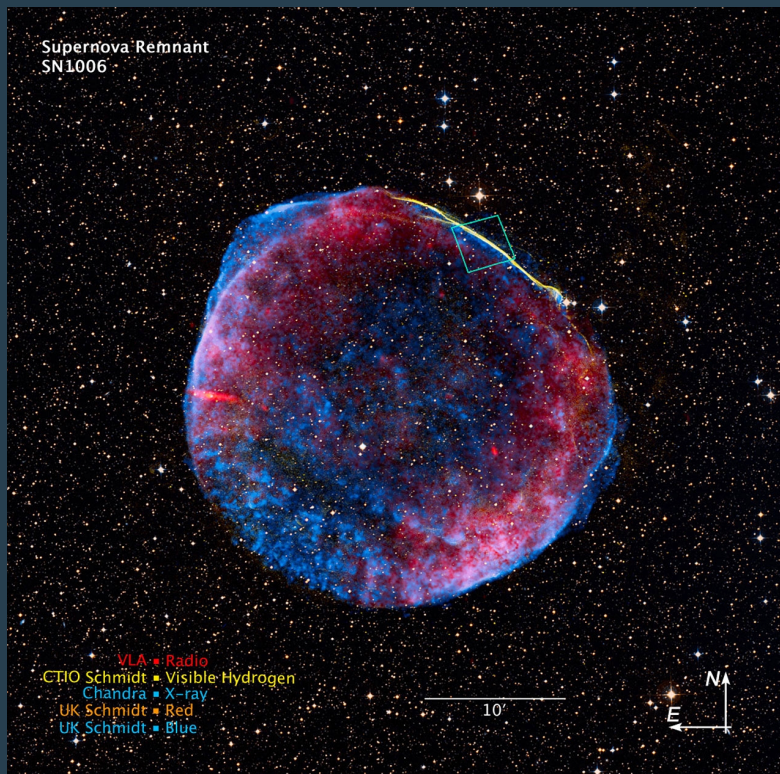
Poster presentation, CRISM 2011, Montpellier

An Integral View of Shocks:
VIMOS-IFU Observations of SN1006

Sladjana Nikolić

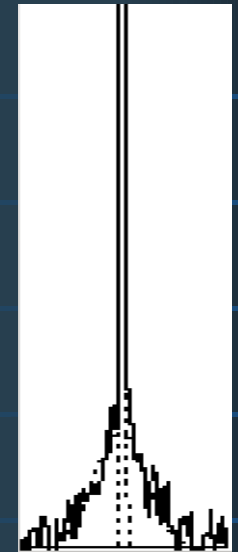
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An Integral View of Shocks

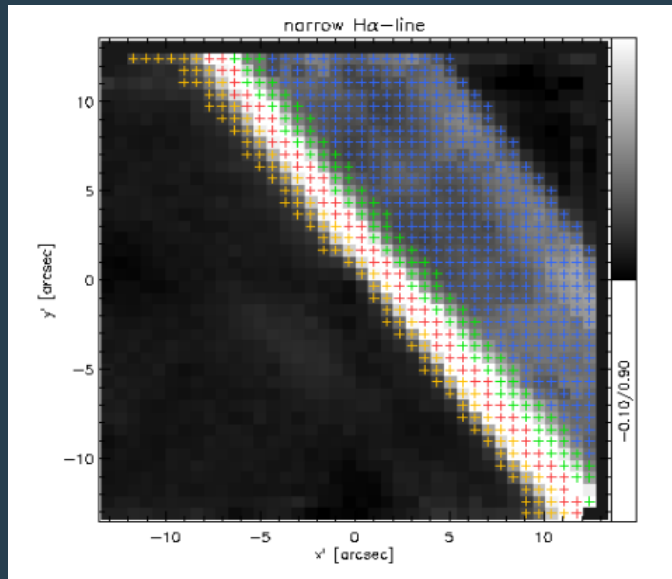


CTIO-Curtis-Schmidt narrow-band H α image (Winkler et al. 2003). The magenta box represents the 27"x27" field-of-view of the VIMOS-IFU spectrograph.

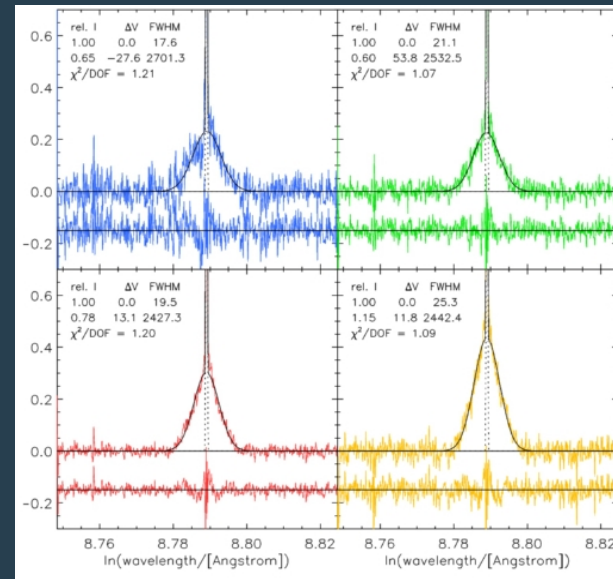
Two component H α line.



VIMOS-IFU Observations of SN 1006

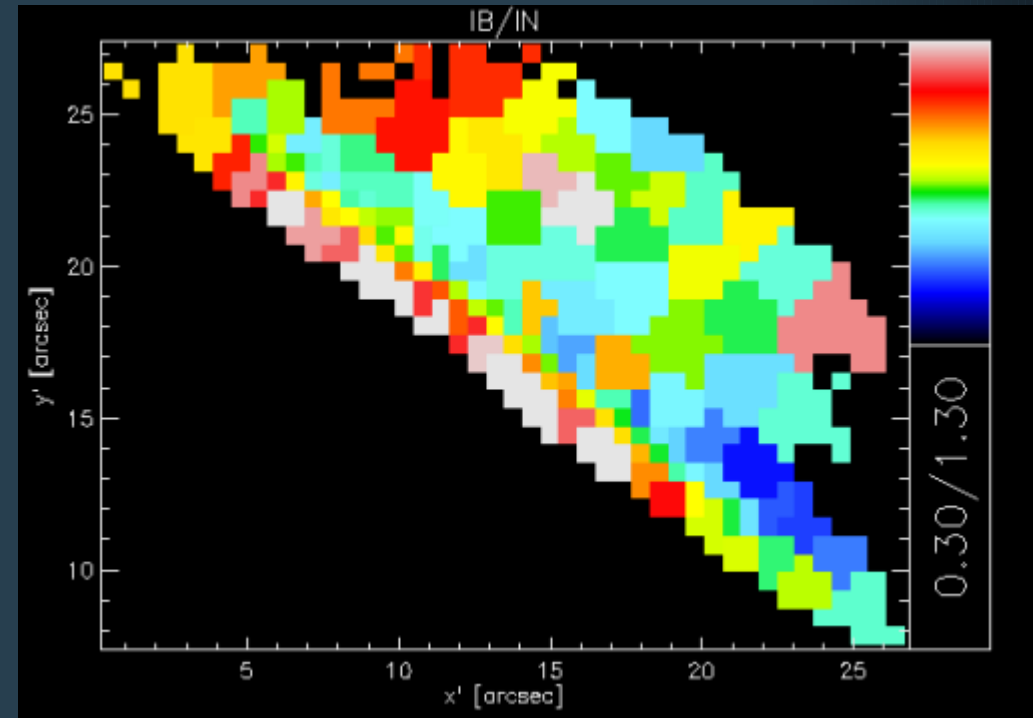
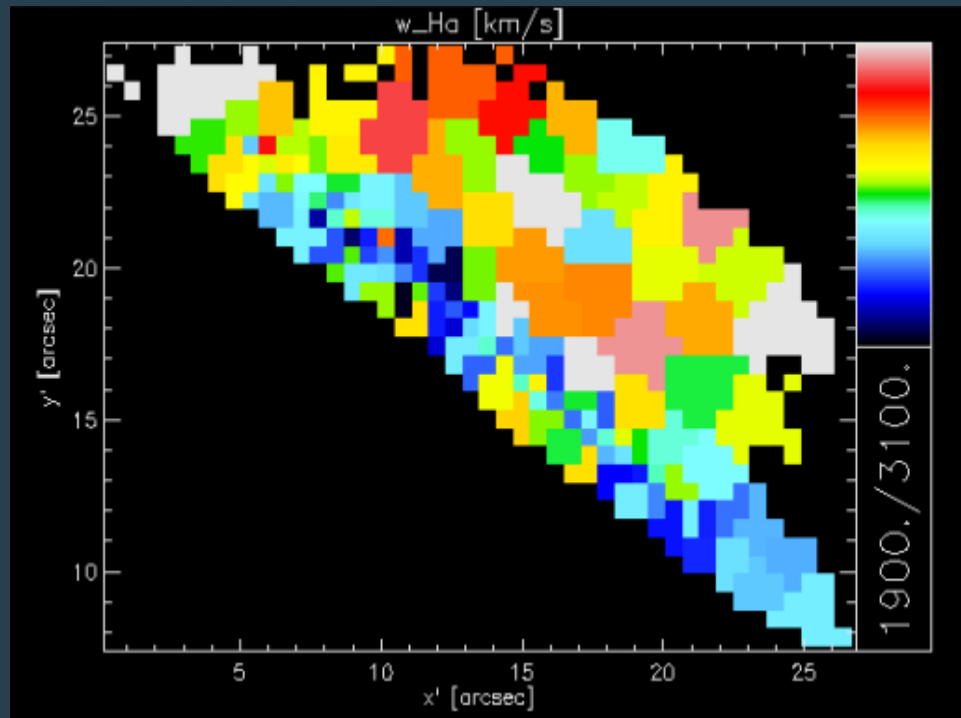


The reduced data cube collapsed in wavelength around the narrow H α -line.



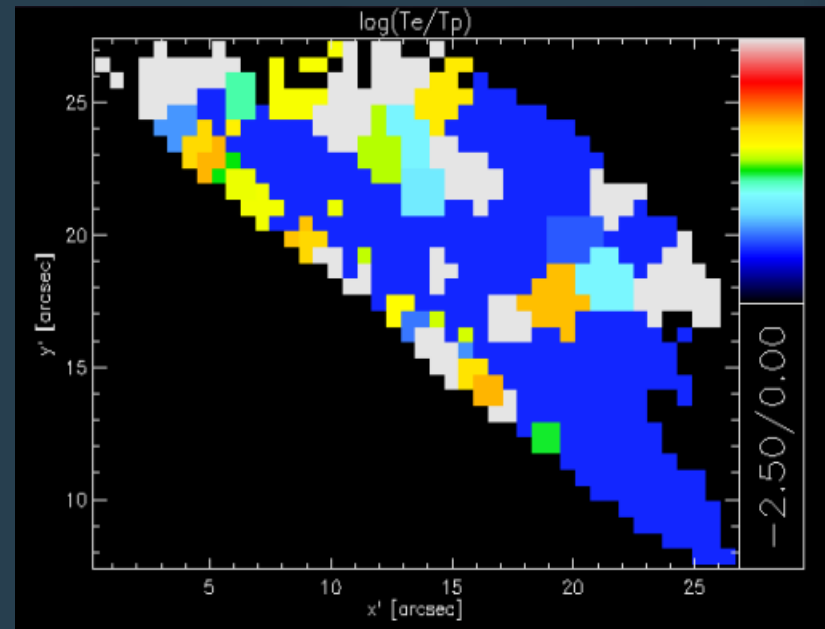
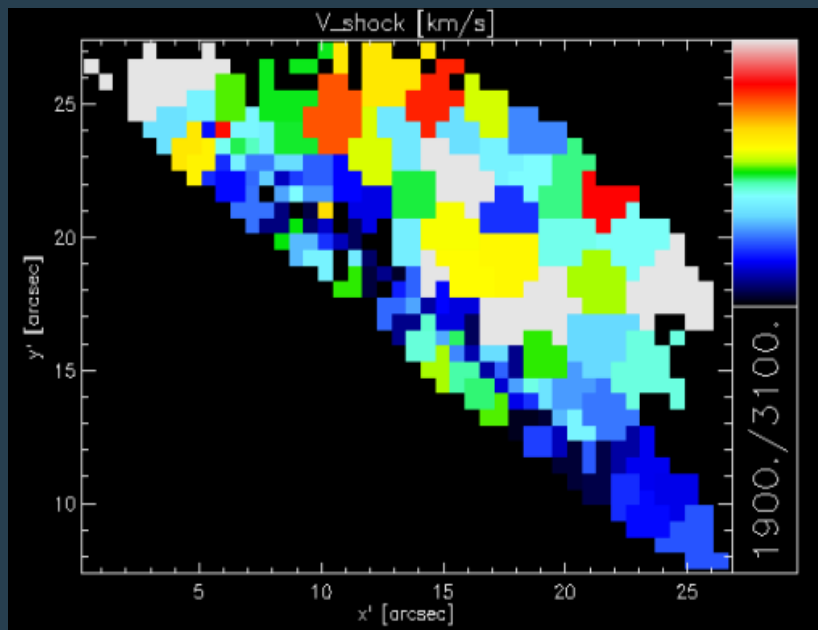
The crosses on the left with four different colours indicate the spaxels for which the spectra have been combined.

Maps of observed values



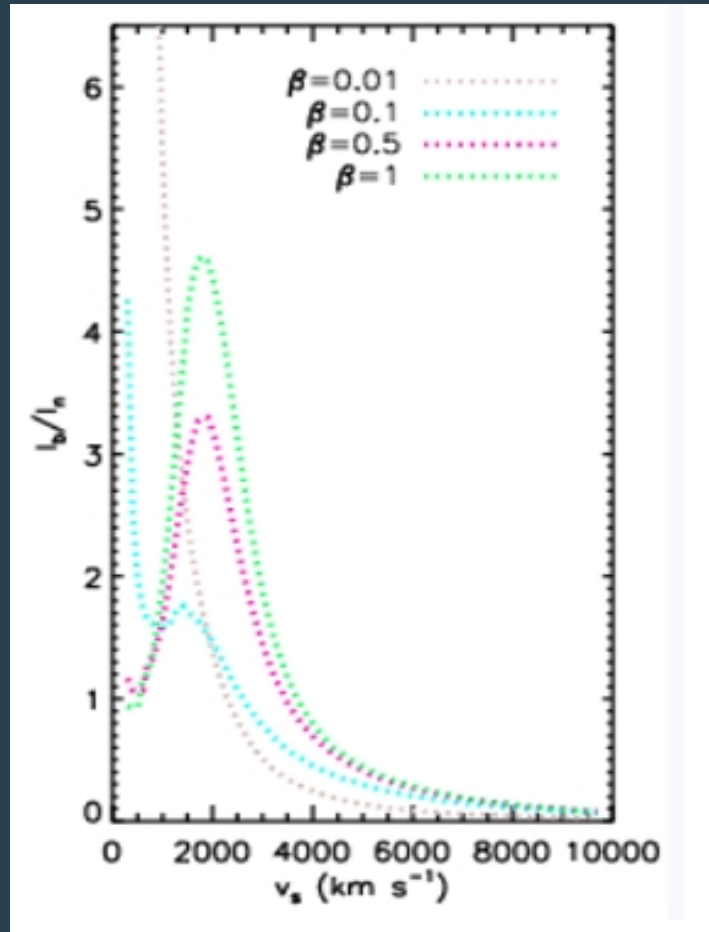
Performing double-Gaussian fits we extracted the FWHM of the broad-line component (w_{Ha}) and the broad-to-narrow line ratio (Ib/In) per bin (we used method the of Cappellari & Copin (2003) to create spatial Voronoi bins in which the combined spectra have a minimal signal-to-noise).

Maps of shock properties



We used the model of Adelsberg et al. (2008) to convert w_{Ha} and I_b/I_n for each bin to a shock velocity (v_{shock}) and electron-to-proton temperature ratio ($\beta \equiv T_e/T_p$).

Van Adelsberg et al. model



Curves from model of van Adelsberg et al (2008).

See you in front of my poster...