

# Extra knot material from Will for the Alma paper

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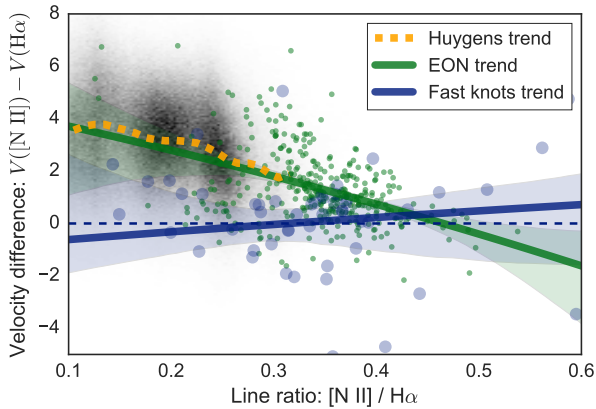
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## ABSTRACT

New material written by Will in 2016 December, describing methodology, results, and interpretation from new knot measurements and fitting.

**Key words:** knots – knots – and more knots!



**Figure 1.** Correlation between [N II]–H $\alpha$  velocity difference,  $\Delta V$ , versus line ratio,  $R_{[\text{N II}]}$ , for different datasets. The grayscale cloud shows the inner Huygens region of the nebula, obtained from  $N \approx 2.5 \times 10^6$  pixels of integral field spectroscopy data from the VLT-MUSE instrument Weilbacher et al. (2015), where the orange dashed line indicates the trend, obtained by averaging the  $\Delta V$  values within  $R_{[\text{N II}]}$  bins of width 0.01. Blue points show the results for the best-measured knots in the “fast” velocity class (restricted to [N II] line width  $< 30 \text{ km s}^{-1}$ ,  $N = 68$  knots), while the blue line indicates the best-fit quadratic trend, with 95% confidence interval shown by the pale blue band. Green points show results for the ( $N = 351$  positions)

## 1 KNOT CLASSIFICATION

## 2 KNOT ANALYSIS

## REFERENCES

Weilbacher P. M., et al., 2015, A&A, 582, A114