

Spectro-polarimetry of macronovae

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PI: Stefano Covino, INAF / Brera Astronomical Observatory (Italy)

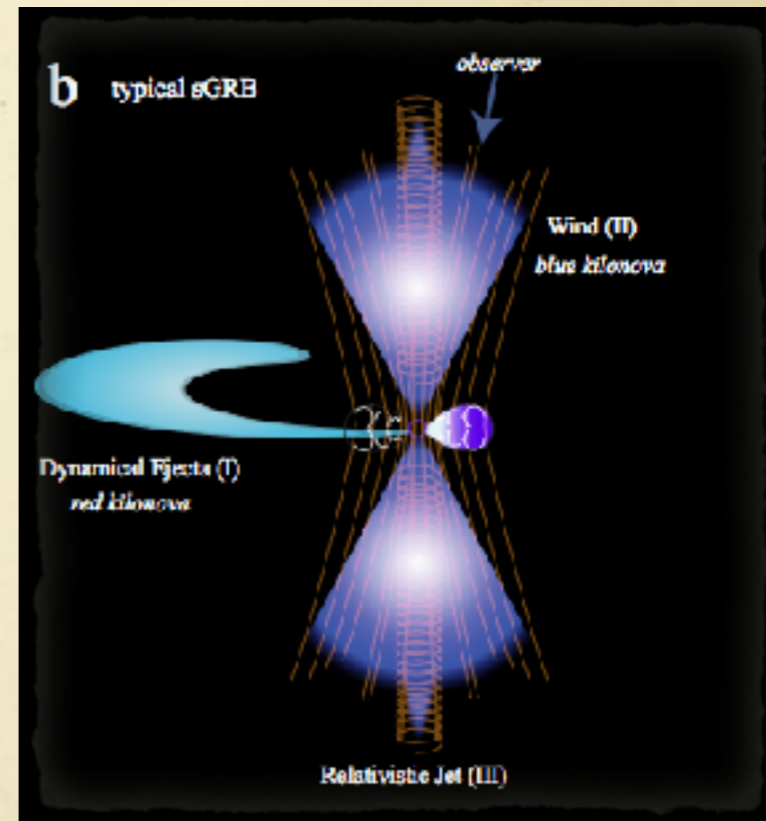
CoPI: Klaas Wiersema, University of Warwick (UK)

This is a truly “inter-GW-collaboration” program. We are part of different teams and yet happily collaborate on this project.

Scientific rationale



Courtesy by Bo Milvang-Jensen and the VINROUGE collaboration

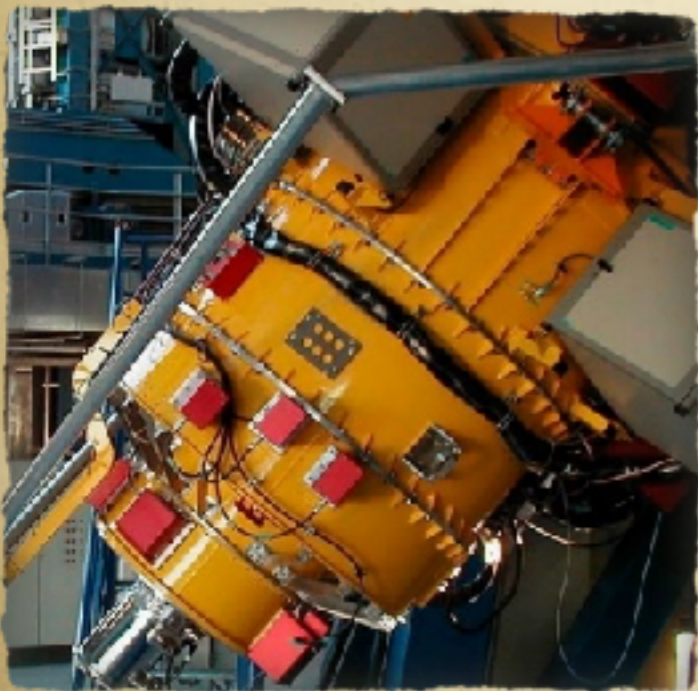


Murguia-Berthier et al. (2017)

Spectro-polarimetry provides a powerful diagnostic tool to derive information on the physical parameters and geometry of the different emission regions identified in these sources.

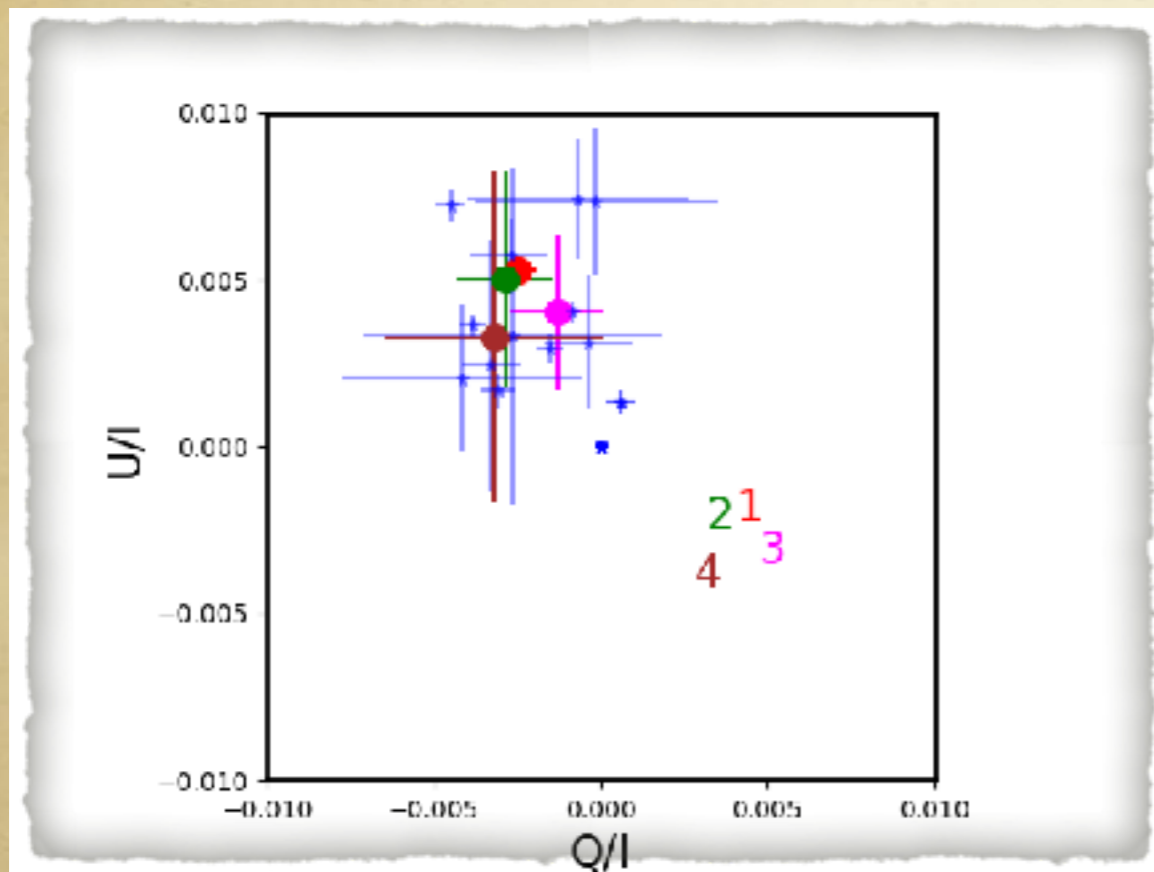
Rules of engagement

- We activate our program for GW electromagnetic counterparts that are not area of interest of GRB proposal.
- No real danger of superposition. “Them” is still “us”!

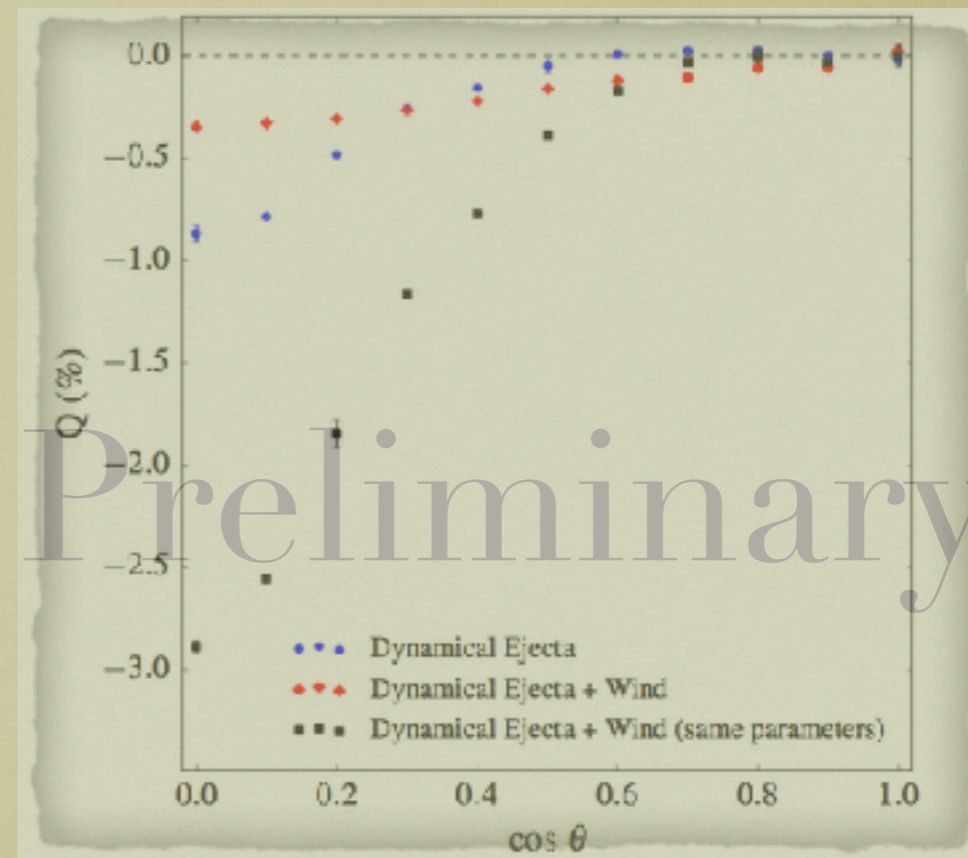


- We have been awarded 6 hours with UT+FORIS2 (imaging and/or specro-polarimetry).
- Strategy requires to monitor the color evolution and, as usual, the earlier the better.

Is it worth?



Covino et al. (2017)



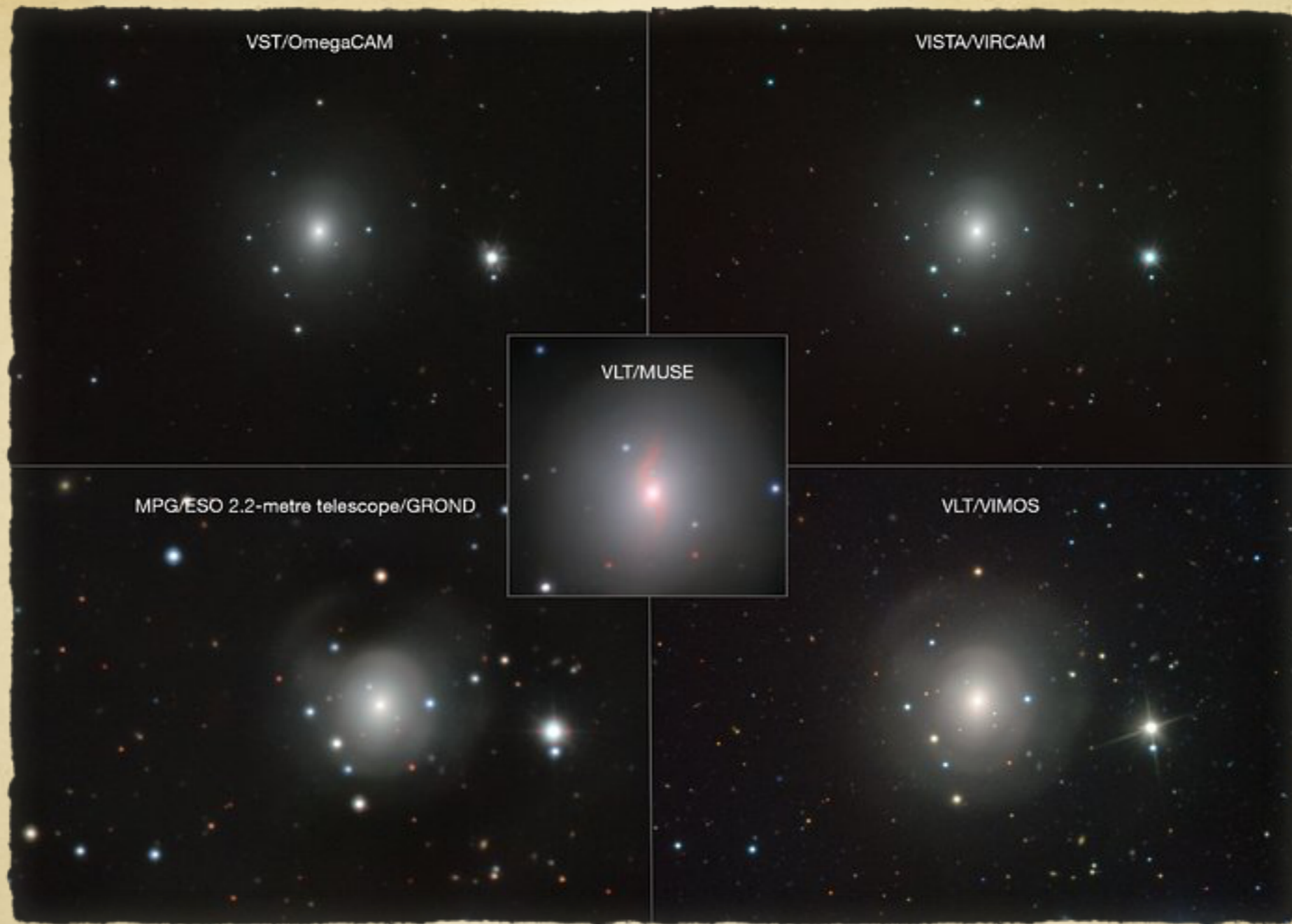
Bulla et al. (in preparation)

Null polarisation for AT2017gfo is likely due to the viewing angle, consistent with other inferences.

General considerations

- Highly focussed program.
- We rely on external sources for the identification of the counterpart (again, often “them” is still “us”).
- We expect up to one event for P101. We plan to resubmit the proposal for the next periods rotating the PIship.





“We have been a lucky generation of astronomers!”

stefano.covino@brera.inaf.it