

The Role of Very Massive Stars and Hyper-Nova in Exploding QSOs/Mergers (and their Shells)

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In this communication we present a summary of the main results obtained –by our team, in the last years– about the role of very massive stars and Hyper-Nova (HyN) in the nuclei and the shells of explosive IR QSOs and IR Mergers.

First, we analyse the role of very massive stars and HyN in IR Mergers with extreme out-flow/explosions (in the nuclear and extra-nuclear regions). In particular, in the Mergers NGC 5514, NGC 2623, NGC 3256, NGC 4038/39 (Antena), Arp 220, IRAS 19254-7245 (Super-Antena), IRAS 01003-2238, etc.

Then, we analyse the role of very massive stars and HyN in the nuclei and shells of explosive QSOs, like: Mrk 231, IRAS 04505-2958, IRAS 17002+5153, IRAS 07598+6528, etc.

Finally, we comment the recent results/discovery of extremelly luminous Super/Hyper Novae: SN 2006gy, SN 2006tf y SN 2005ap. Which confirm our suggestion about the existence of a class of HyN, associated mainly with very massive progenitors, similar to the massive star Eta Carinae.