

# Nebular emission consistent stellar population synthesis of jellyfish galaxies

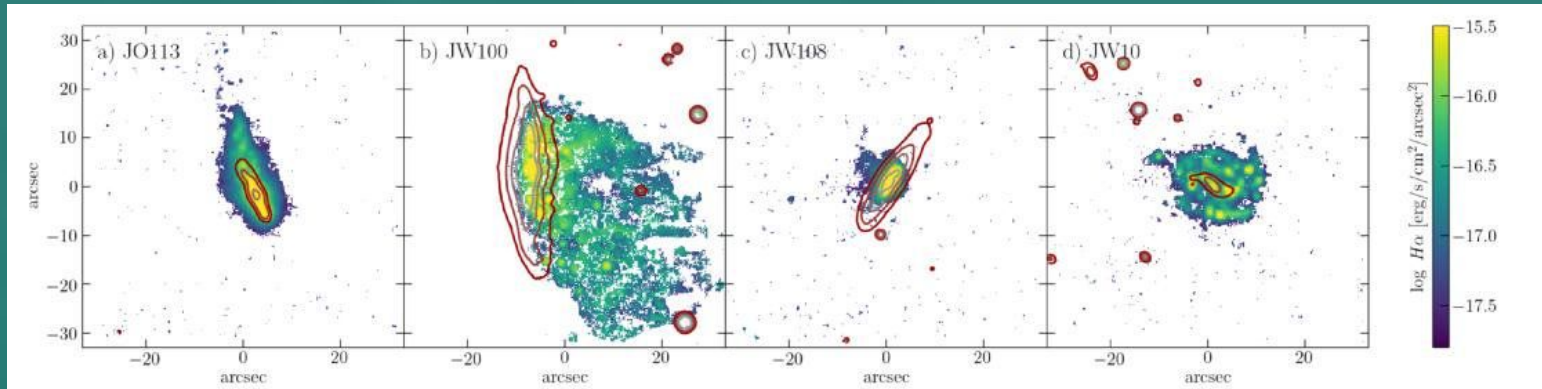
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Ana Chies Santos  
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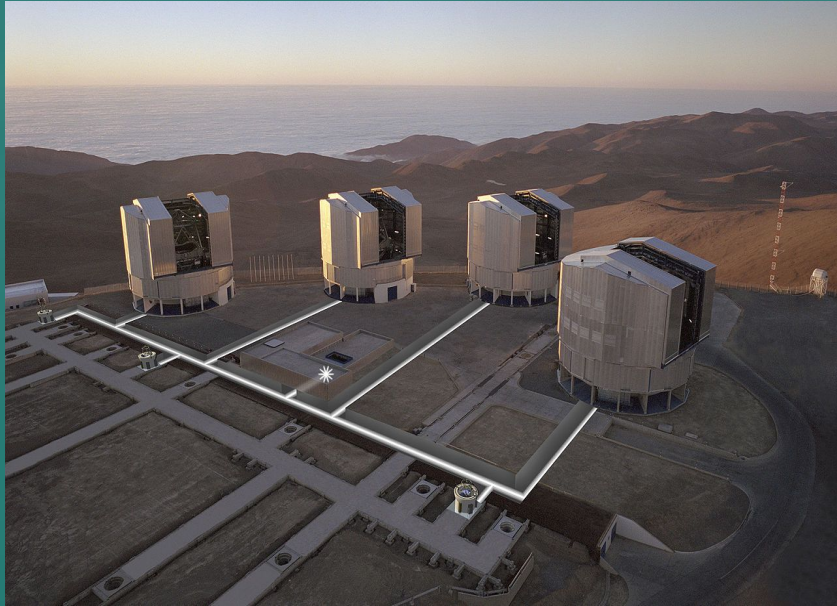
# GASP sample

GASP (GAs Stripping Phenomena in galaxies) is a programme that observed 94 jellyfish galaxies at  $z=0.04-0.07$  (Pogiantti et al. 2017a)



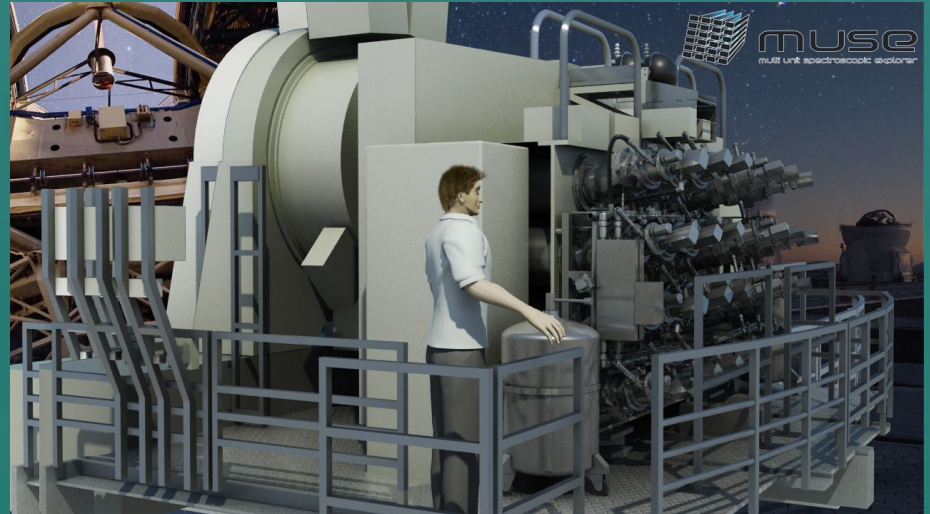
**Figure 2.**  $H\alpha$  flux emission maps (colourbar) on top of isophotes of  $H\alpha$  continuum in steps of  $0.5 \text{ mag/arcsec}^{-2}$  (red contours) for 4 example GASP galaxies in different stripping stages. From left to right: a) A galaxy with moderate signs of “Stripping”; b) a galaxy featuring very long gas tails indicative of “Extreme-stripping”; c) a truncated “Post-stripping” galaxy; and d) a disturbed galaxy where the physical cause of the disturbance is unclear (“?”).

# MUSE datacubes

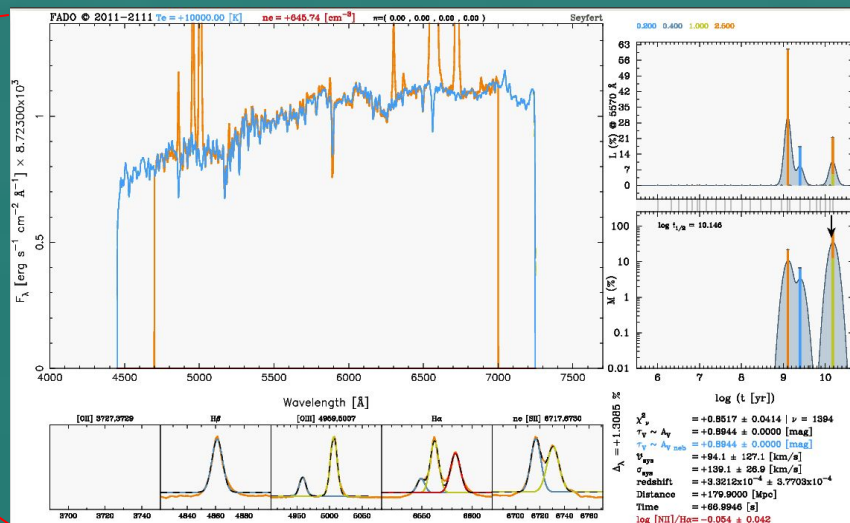
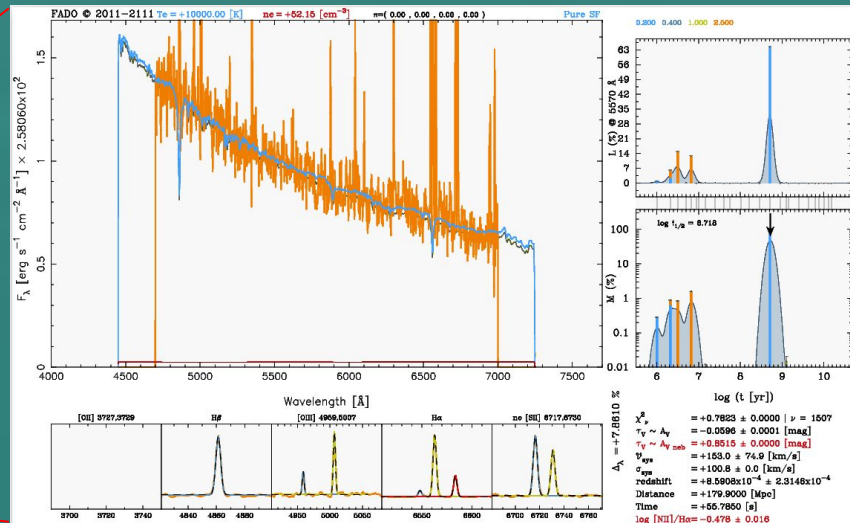
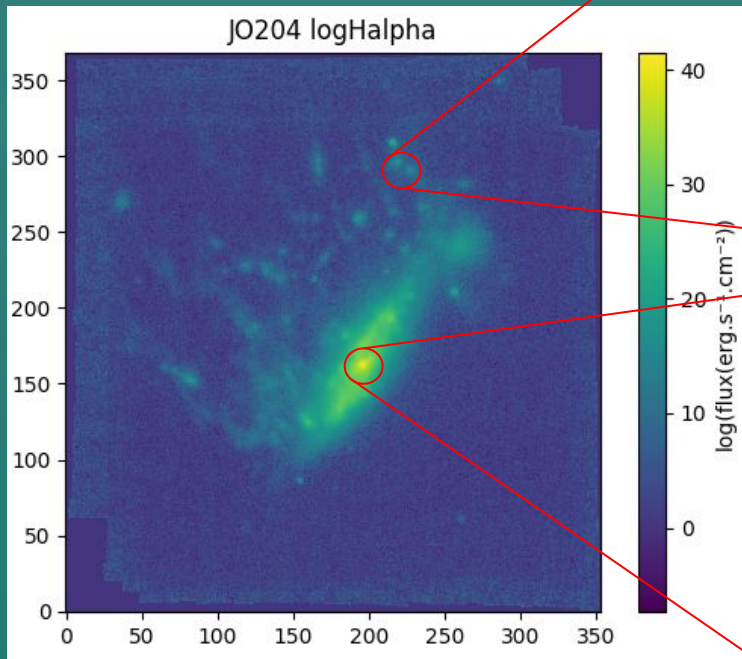


MUSE is a spectrometer in the VLT with a spatial resolution of  $0.4''$  and it detects wavelengths between the blue and the NI.

<https://www.eso.org/sci/facilities/develop/instruments/muse.html>



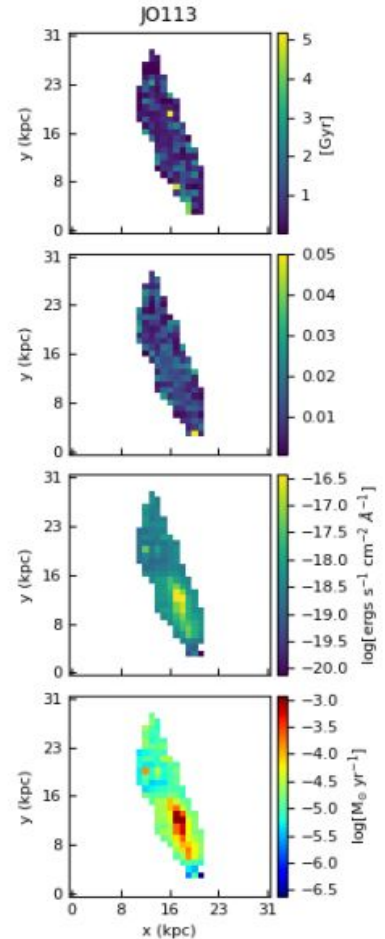
# Synthesis with FADO



# Maps

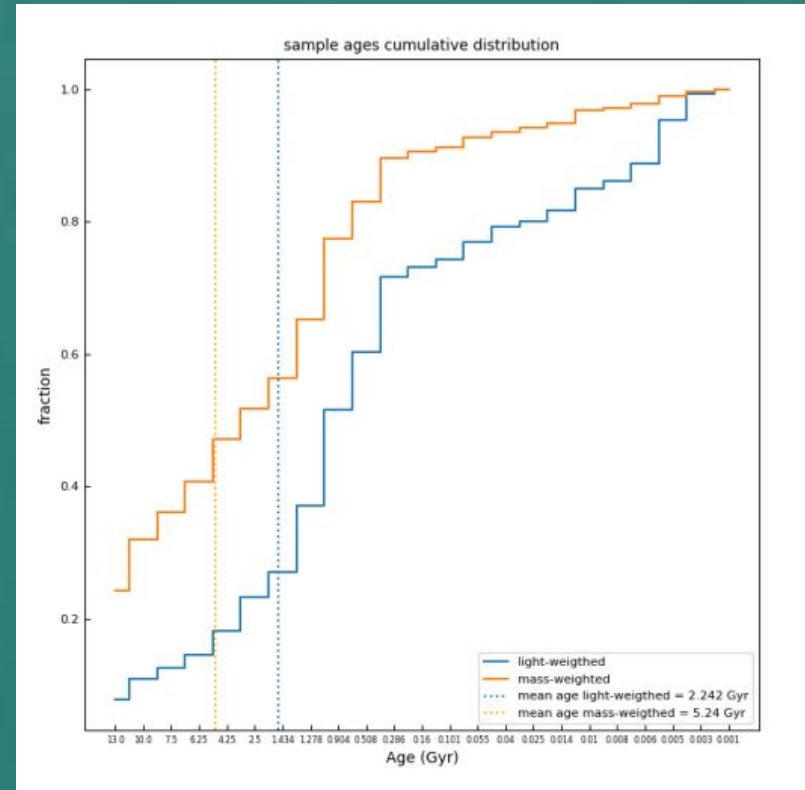
We created, for each of the 19 galaxies, maps of:

- Mean stellar ages and metallicities, weighted by both light and mass
- Emission of H $\alpha$  line
- Stellar formation density



# Histograms

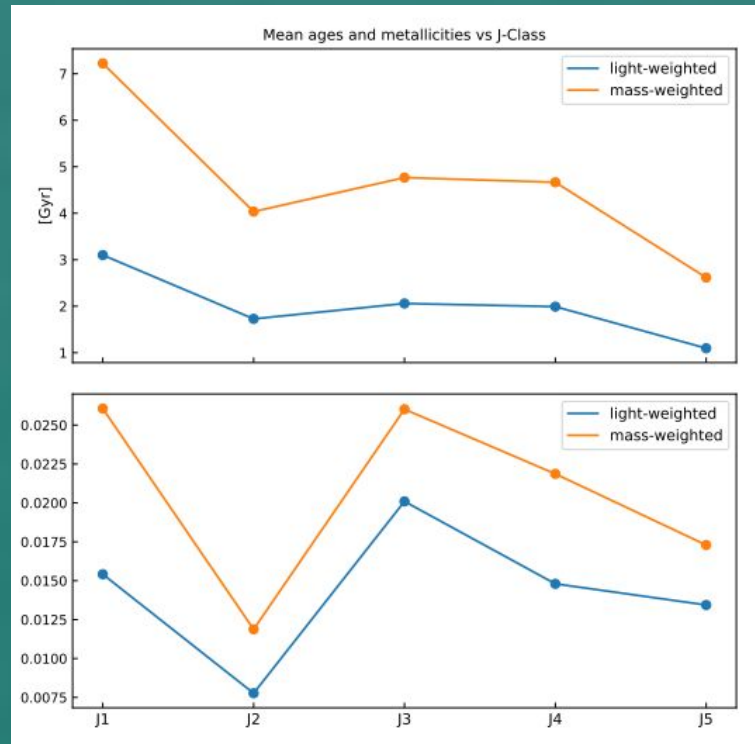
We made, for each galaxy, histograms with the fraction of stars formed in different ages, as well as a mean histogram of the sample



# J-classes

We grouped our sample by the J-class (which is a visual classification of jellyfish, with J5 being the most disturbed ones and J1 being those with slight asymmetries).

We then computed the mean ages and metallicities of each group.



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